TENTATIVE ORDER (November 5, 2001 Draft)

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. 01-20
NPDES No. CAS618030

Waste Discharge Requirements
for
the County of Orange, Orange County Flood Control District
and
The Incorporated Cities of Orange County Within the Santa Ana Region
Areawide Urban Storm Water Runoff
Orange County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board) finds that:

1. The 1987 amendments to the Clean Water Act (CWA) added Section 402(p) establishing a framework for regulating municipal and industrial (including construction) storm water discharges under the National Pollutant Discharge Elimination System (NPDES). Section 402(p) of the CWA requires NPDES permits for storm water discharges from municipal separate storm sewer systems (MS4) as well as other designated storm water discharges that are considered significant contributors of pollutants to waters of the United States. On November 16, 1990, the United States Environmental Protection Agency (hereinafter EPA) amended its NPDES permit regulations (40 CFR Parts 122, 123 and 124) to describe permit application requirements for storm water discharges.

2. Prior to EPA's promulgation of the storm water permit regulations, the three counties (Orange, Riverside, and San Bernardino) and the incorporated cities within the jurisdiction of the Santa Ana Regional Board requested areawide NPDES permits for urban storm water runoff. On July 13, 1990, the Regional Board adopted Order No. 90-71 for urban storm water runoff from urban areas in Orange County within the Santa Ana Region. The County of Orange was named as the principal permittee and the Orange County Flood Control District (OCFCD) and the incorporated cities were named as the co-permittees. Order No. 96-31, issued by the Regional Board on March 8, 1996, renewed the permit for another five years.

3. Order No. 96-31 expired on March 1, 2001. On September 1, 2000, the County of Orange Public Facilities and Resources Department (OCPFRD) and the Orange County Flood Control District (OCFCD) in cooperation with the cities of Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Woods, La Habra, La Palma, Lake Forest, Los Alamitos, Newport Beach, Orange, Placentia, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda (hereinafter collectively referred to as permittees or dischargers), submitted NPDES Application No. CAS618030 and a Report of Waste Discharge for reissuance of their areawide storm water permit. In order to more effectively carry out the requirements of this order, the permittees have agreed that the County of Orange will continue as principal permittee and the OCFCD and the incorporated cities will continue as co-permittees. On March 5, 2001, Order No. 96-31, NPDES No. CAS618030, was

administratively extended in accordance with Title 23, Division 3, Chapter 9, §2235.4 of the California Code of Regulations.

4. The permittees serve a population of approximately 2.8 million, occupying an area of approximately 786 square miles (including unincorporated areas and the limits of 33 cities, 25 of which are within the jurisdiction of this Regional Board; two of the cities, Laguna Woods and Lake Forest, are within both the San Diego and Santa Ana Regional Boards' jurisdictions). The permitted area is shown on Attachment A. The permittees have jurisdiction over and /or maintenance responsibility for storm water conveyance systems within Orange County. The County's systems include an estimated 400 miles of storm drain systems. A major portion of the urbanized areas of Orange County drains into waterbodies within this Regional Board's jurisdiction. In certain cases, where a natural streambed is modified to convey storm water flows, the conveyance system becomes both an MS4 and a receiving water. The major storm drain systems and drainage areas in Orange County, which are within this Region, are shown on Attachment B. A portion of the Orange County drainage area is within the jurisdiction of the San Diego Regional Board and is regulated under an order issued by that Board.

5. Storm water outfalls from the MS4 systems in Orange County enter or are tributary to, various water bodies of the Region. The permitted area can be subdivided into five tributary watersheds: the San Gabriel River drainage area, the Huntington Harbour and Bolsa Bay drainage area, the Santa Ana River drainage area, Newport Bay drainage area, and the Irvine and Newport Coast Areas of Special Biological Significance (see Attachment B). These watersheds are tributary to the Pacific Ocean. The surface water bodies in Orange County include:

   Inland Surface Streams

   a. Santa Ana River, Reaches 1 and 2,
   b. Silverado Creek (tributary to Santiago Creek),
   c. Santiago Creek, Reaches 1, 2, 3, and 4 (tributary to the Santa Ana River),
   d. San Diego Creek, Reaches 1 and 2 (tributary to Newport Bay),
   e. San Joaquin Freshwater Marsh (tributary to San Diego Creek),
   f. All other tributaries to these Creeks: Bonita Creek, Serrano Creek, Peters Canyon Wash, Hicks Canyon Wash, Bee Canyon Wash, Borrego Canyon Wash, Agua Chinon Wash, Laguna Canyon Wash, Rattlesnake Canyon Wash, Sand Canyon Wash, Black Star Creek, Carbon Canyon Creek, Coyote Creek and other tributaries.

   Bays, Estuaries, and Tidal Prisms

   a. Anaheim Bay,
   b. Sunset Bay,
   c. Bolsa Bay and Bolsa Chica Ecological Reserve,
   d. Lower and Upper Newport Bay,
   e. Tidal Prism of Santa Ana River (to within 1000 feet of Victoria Street) and Newport Slough, Santa Ana Salt Marsh,

f. Tidal Prism of San Gabriel River (River Mouth to Marina Drive),

g. Tidal Prisms of Flood Control Channels Discharging to Coastal or Bay Waters (e.g. Huntington Harbour),

Ocean Waters

Nearshore Zone

a. San Gabriel River to Poppy Street in Corona Del Mar,

b. Poppy Street to Southeast Regional Boundary,

Offshore Zone

a. Waters between Nearshore Zone and Limit of State Waters,

Lakes and Reservoirs

a. Anaheim Lakes,

b. Irvine Lake (Santiago Reservoir), and

c. Laguna, Peters Canyon, and Rattlesnake Reservoirs.

The beneficial uses of these water bodies include: municipal and domestic supply, agricultural supply, industrial service and process supply, groundwater recharge, navigation, hydropower generation, water contact recreation, non-contact water recreation, commercial and sportfishing, warm freshwater and limited warm freshwater habitats, cold freshwater habitat, preservation of biological habitats of special significance, wildlife habitat, preservation of rare, threatened or endangered species, marine habitat, shellfish harvesting, spawning, reproduction and development of aquatic habitats, and estuarine habitat . The ultimate goal of this storm water management program is to protect the beneficial uses of the receiving waters.

6. The Santa Ana River Basin is the major watershed within the jurisdiction of the Regional Board. The lower Santa Ana River Basin (downstream from Prado Basin) includes the Orange County drainage areas and the Upper Santa Ana River Basin includes the San Bernardino and the Riverside drainage areas. Generally, the San Bernardino County drainage areas drain to the Riverside County drainage areas, and Riverside County drainage areas discharge to Orange County.

7. Within the Region, runoff from the San Bernardino County areas is generally conveyed to the Riverside County areas through the Santa Ana River or other drainage channels tributary to the Santa Ana River. These flows are then discharged to Reach 2 of the Santa Ana River through Prado Basin (Reach 3 of the Santa Ana River). Most of the flow in Reach 2 is recharged in Orange County. During wet weather, some of the flow is discharged to the Pacific Ocean through Reach 1 of the Santa Ana River.

8. The three county areas within this Region are regulated under three areawide permits for urban storm water runoff. These areawide NPDES permits are:

   a. Orange County, NPDES No. CAS618030;

   b. Riverside County, NPDES No. CAS618033; and

c. San Bernardino County, NPDES No. CAS618036.

For an effective watershed management program, cooperation and coordination among the regulators, the municipal permittees, the public, and other entities are essential.

9. Studies conducted by the EPA, the states, flood control districts and other entities indicate the following major sources for urban storm water pollution nationwide:

   a. Industrial sites where appropriate pollution control and best management practices (BMPs)[1] are not implemented;

   b. Construction sites where erosion and siltation controls and BMPs are not implemented; and

   c. Urban runoff where the drainage area is not properly managed.

10. A number of permits were adopted to address pollution from the sources identified in Finding 9, above. The State Board issued two statewide general NPDES permits: one for storm water runoff from industrial activities (NPDES No. CAS000001, General Industrial Activities Storm Water Permit) and a second one for storm water runoff from construction activities (NPDES No. CAS000002, General Construction Activity Storm Water Permit). Industrial activities (as identified in 40 CFR 122.26(b)(14) and construction sites of five acres or more, are required to obtain coverage under these statewide general permits. The permittees have developed project conditions of approval requiring coverage under the State's General Permit for new developments to be implemented at the time of grading or building permit issuance for construction sites on five acres or more and at the time of local permit issuance for industrial facilities. The State Board also adopted Order No. 99-06-DWQ, NPDES No. CAS000003, for storm water runoff from facilities (including freeways and highways) owned and/or operated by Caltrans. The Regional Board adopted Order 99-11, NPDES No. CAG018001, for concentrated animal feeding operations, including dairies. The Regional Board also issues individual storm water permits for certain industrial facilities within the Region. Currently there are 22 individual storm water NPDES permits; 8 of these facilities are located in the Orange County area. Additionally, for a number of facilities that discharge process wastewater and storm water, storm water discharge requirements are included with the facilities' NPDES permit for process wastewater.

11. In most cases, the industries and construction sites covered under the Statewide General Industrial and Construction Permits discharge into storm drains and/or flood control facilities owned and operated by the permittees. These industries and construction sites are also regulated under local laws and regulations. A coordinated effort between the permittees and the Regional Board staff is critical to avoid duplicative and overlapping efforts when overseeing the compliance of dischargers covered under the Statewide General Permits. As part of this coordination, the permittees have been notifying Regional Board staff when they observe conditions that pose a threat or potential threat to water quality, or when an industrial facility or

[1] Best Management Practices (BMPs) are water quality management practices that are maximized in efficiency for the control of storm water runoff pollution.

construction activity that has failed to obtain required coverage under the appropriate general storm water permit.

12. The permittees have the authority to approve plans for residential, commercial, and industrial developments. If not properly controlled and managed, urbanization could result in the discharge of pollutants in storm water runoff. Urban area runoff (Finding 9. c) may contain elevated levels of pathogens (bacteria, protozoa, viruses), sediment, trash, fertilizers (nutrients, compounds of nitrogen and phosphorus), pesticides (DDT, Chlordane, Diazinon, Chlorpyrifos), heavy metals (cadmium, chromium, copper, lead, zinc), and petroleum products (oil, grease, petroleum hydrocarbons, polycyclic aromatic hydrocarbons). Storm water can carry these pollutants to rivers, streams, lakes, bays and the ocean (receiving waters).

13. Pollutants in urban runoff can impact the beneficial uses of the receiving waters and can cause or threaten to cause a condition of pollution or nuisance. Pathogens (from sanitary sewer overflows, septic system leaks, and spills and leaks from portable toilets, pets, wildlife and human activities) can impact water contact recreation, non-contact water recreation and shellfish harvesting. Microbial contamination of the beaches from urban runoff and other sources has resulted in a number of health advisories issued by the Orange County Health Officer. Floatables (from trash) are an aesthetic nuisance and can be a substrate for algae and insect vectors. Oil and grease can coat birds and aquatic organisms, adversely affecting respiration and/or thermoregulation. Other petroleum hydrocarbon components can cause toxicity to aquatic organisms and can impact human health. Suspended and settleable solids (from sediment, trash, and industrial activities) can be deleterious to benthic organisms and may cause anaerobic conditions to form. Sediments and other suspended particulates can cause turbidity, clog fish gills and interfere with respiration in aquatic fauna. They can also screen out light, hindering photosynthesis and normal aquatic plant growth and development. Toxic substances (from pesticides, herbicides, petroleum products, metals, industrial wastes) can cause acute and/or chronic toxicity, and can bioaccumulate in organisms to levels that may be harmful to human health. Nutrients (from fertilizers, confined animal facilities, pets, birds) can cause excessive algal blooms. These blooms can lead to problems with taste, odor, color and increased turbidity, and can depress the dissolved oxygen content, leading to fish kills.

14. A major portion of Orange County is urbanized with residential, commercial, and industrial developments. Urban development increases impervious surfaces and storm water runoff volume and velocity, and decreases vegetated pervious surface available for infiltration of storm water. Increase in runoff volume and velocity can cause scour, erosion (sheet, rill and/or gully), aggradation (raising of a streambed from sediment deposition), and can change fluvial geomorphology, hydrology, and aquatic ecosystems. The local agencies (the permittees) are the owners and operators of the MS4 systems and have established appropriate legal authority to control some but not all discharges to these systems (see Finding 16). The permittees have established appropriate legal authority to control discharges into the MS4 systems. They adopted grading and/or erosion control ordinances, guidelines and best management practices (BMPs) for municipal, commercial, and industrial activities, and a drainage area management plan (DAMP). The permittees must exercise a combination of these programs, policies, and legal authority to ensure that pollutant loads resulting from urbanization are properly controlled and managed.

15. This order regulates urban storm water runoff from areas under the jurisdiction of the permittees. Urban storm water runoff includes those discharges from residential, commercial, industrial, and construction areas within the permitted area and excludes discharges from feedlots, dairies, and farms (also see Finding 16). Storm water discharges consist of surface runoff generated from various land uses in all the hydrologic drainage areas that discharge into the water bodies of the U.S. The quality of these discharges varies considerably and is affected by land use activities, basin hydrology and geology, season, the frequency and duration of storm events, and the presence of illicit disposal practices and illegal connections.

16. The permittees may lack legal jurisdiction over storm water discharges into their systems from some State and federal facilities, utilities and special districts, Native American tribal lands, waste water management agencies and other point and non-point source discharges otherwise permitted by the Regional Board. The Regional Board recognizes that the permittees should not be held responsible for such facilities and/or discharges. Similarly, certain activities that generate pollutants present in storm water runoff may be beyond the ability of the permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear and leaching of naturally occurring minerals from local geography.

17. This order is intended to regulate the discharge of pollutants in urban storm water runoff from anthropogenic (generated from human activities) sources within the jurisdiction and control of the permittees and is not intended to address background or naturally occurring pollutants or flows.

18. The water quality assessment conducted by Regional Board staff has identified a number of other beneficial use impairments due, in part, to urban runoff. Section 303(b) of the CWA requires each of the regional boards to routinely monitor and assess the quality of waters of the region. If this assessment indicates that beneficial uses and/or water quality objectives are not met, then that waterbody must be listed under Section 303(d) of the CWA as an impaired waterbody. The 1998 water quality assessment listed a number of water bodies within the Region under Section 303(d) as impaired waterbodies. In the Orange County area, these include: (1) San Diego Creek, Reach 1 (listed for sedimentation/siltation, metals, nutrients, pesticides); (2) San Diego Creek, Reach 2 (listed for sedimentation/siltation, nutrients, metals, unknown toxicity); (3) Upper Newport Bay Ecological Reserve (listed for sedimentation/siltation, metals, nutrients, pathogens, pesticides); (4) Lower Newport Bay (listed for metals, pesticides, pathogens, nutrients, priority organics); (5) Anaheim Bay (listed for metals, pesticides); 6) Huntington Harbour (listed for metals, pesticides, pathogens); 7) Santiago Creek, Reach 4 (listed for salinity, TDS, chlorides); and 8) Silverado Creek (listed for pathogens, salinity, TDS, chlorides). For some of these impaired waterbodies, one of the listed causes of impairment is urban runoff.

19. Federal regulations require that a total maximum daily load (TMDL) be established for each 303(d) listed waterbody for each of the pollutants causing impairment. The TMDL is the total amount of the problem pollutant that can be discharged while water quality standards in the receiving water are attained, i.e., water quality objectives are met and the beneficial uses are protected. It is the sum of the individual wasteload allocations (WLA) for point source inputs, load allocations (LA) for non-point source inputs and natural background, with a margin of

safety. The TMDLs are the basis for limitations established in waste discharge requirements. TMDLs have been developed for sediment and nutrients for San Diego Creek and Newport Bay. A fecal coliform TMDL for Newport Bay has also been established The WLAs from these TMDLs are included in this order. Dischargers to these water bodies are currently implementing these TMDLs This order specifies the WLAs and includes requirements for the implementation of these WLAs.

20. The MS4s generally contain non-storm water flows such as irrigation runoff, runoff from non-commercial car washes, runoff from miscellaneous washing and cleaning operations, and other nuisance flows. . Discharges of non-storm water containing pollutants into the MS4 systems and to waters of the U.S. are prohibited unless they are regulated under separate NPDES permit; or are exempt as indicated in Discharge Prohibitions, Section III, Item 4 of this order.

21. Order No. 90-71 (first term permit) required the permittees to: (1) develop and implement the DAMP and a storm water and receiving water monitoring plan; (2) eliminate illegal and illicit discharges to the MS4s; and (3) enact the necessary legal authority to effectively prohibit such discharges. The overall goal of these requirements was to reduce pollutant loadings to surface waters from urban runoff to the maximum extent practicable (MEP)[2]. Order No. 96-31 (second term permit) required continued implementation of the DAMP and the monitoring plan, and required the permittees to focus on those areas that threaten beneficial uses.

22. This order (Order No. 01-20, third term permit) outlines additional steps for an effective storm water management program and specifies requirements to protect the beneficial uses of all receiving waters. This order requires the permittees to examine sources of pollutants in storm water runoff from activities which the permittees conduct, approve, regulate and/or authorize by issuing a license or permit.

23. The Report of Waste Discharge (the permit renewal application) included the following major documents:

    a. Summary of status of current Storm Water Management Program;

    b. Proposed Plan of Storm Water Quality Management Activities for 2001-2006 as outlined in the Updated DAMP. The 2000 DAMP includes all the activities the permittees propose to undertake during the next permit term, goals and objectives of such activities, an evaluation of the need for additional source control and/or structural and non-structural BMPs and proposed pilot studies;

    c. A Performance Commitment that includes new and existing program elements and compliance schedules necessary to implement controls that reduce pollutants to the maximum extent practicable.

    d. A summary of procedures implemented to detect illegal discharges and illicit disposal practices;

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[2] Maximum Extent Practicable (MEP) means to the maximum extent feasible, taking into account considerations of synergistic, additive, and competing factors, including but not limited to, gravity of the problem, technical feasibility,fiscal feasibility, public health risks, societal concerns, and social benefits.

e. A summary of enforcement procedures and actions taken to require storm water discharges to comply with the approved storm water management programs;

f. A summary of public agency activity, results of monitoring program, and program effectiveness; and

g. A fiscal analysis.

24. The permittees own and/or operate facilities where industrial or related activities take place that may have an impact on storm water quality. Some of the permittees also enter into contracts with outside parties to carry out municipal related activities that may also have an impact on storm water quality. These facilities and related activities include, but are not limited to, street sweeping, catch basin cleaning, maintenance yards, vehicle and equipment maintenance areas, waste transfer stations, corporation and storage yards, parks and recreational facilities, landscape and swimming pool maintenance activities, storm drain system maintenance activities and the application of herbicides, algaecides and pesticides. The permittees have prepared and implemented an environmental performance report for appropriate fixed public facilities under their jurisdiction, and identified best management practices for those activities found to require pollution prevention measures. Non-storm water discharges from these facilities and/or activities could also affect water quality. This order prohibits non-storm water discharges from public facilities unless the discharges are exempt under Section III, Discharge Limitations, 4 & 6 of this order or are permitted by the Regional Board under an individual NPDES permit. The second term permit required the permittees to prepare an Environmental Performance Reporting Program to identify significant issues and to implement corrective actions at municipal facilities and activities. Most of this work has been completed. However, this is a continuing process and this order requires the permittees to continue this process at least on an annual basis.

25. Successful implementation of the provisions and limitations in this order will require the cooperation of all the public agency organizations within Orange County having programs/activities that have an impact on storm water quality. A list of these organizations is included in Attachment C. As such, these organizations are expected to actively participate in implementing the Orange County NPDES Storm Water Program. The Regional Board has the discretion and authority to require non-cooperating entities to participate in this areawide permit or obtain individual storm water discharge permits, pursuant to 40 CFR 122.26(a). The permittees have developed a Storm Water Implementation Agreement among the County, the cities and the Orange County Flood Control District. The Implementation Agreement establishes the responsibilities of each party and a funding mechanism for the shared costs, and recognizes the Technical Advisory Committee (TAC).

26. The major focus of storm water pollution prevention is the development and implementation of an appropriate DAMP including best management practices (BMPs). The ultimate goal of the urban storm water management program is to support attainment of water quality objectives for the receiving waters and to protect beneficial uses through the implementation of the DAMP. The permittees developed and submitted a DAMP, which was approved on May 3, 1994.

27. The DAMP is a dynamic document and the permittees have implemented, or are in the process of implementing, the various elements of the DAMP. A revised DAMP was included with the NPDES permit renewal application. This order requires the permittees to continue to implement

the BMPs listed in the revised DAMP and to effectively prohibit illegal and illicit discharges to the storm drain system.

28. Urban runoff contains pollutants from privately owned and operated facilities, such as residences, businesses, private and/or public institutions, and commercial establishments. Therefore, a successful storm water management plan should include the participation and cooperation of the public, businesses, the permittees and the regulators. The DAMP has a strong emphasis on public education.

29. The Orange County DAMP defined: (1) a management structure for the permittees' compliance effort; (2) a formal agreement to underpin cooperation, and (3) a detailed municipal effort to develop, implement, and evaluate various BMPs or control programs in the areas of public agency activities, public information, new development and construction, public works construction, industrial discharger identification, and illicit discharger/connection identification and elimination.

30. In order to characterize storm water discharges, to identify problem areas, to determine the impact of urban runoff on receiving waters, and to determine the effectiveness of the various BMPs, an effective monitoring program is critical. The principal permittee administers the monitoring program for the permittees. This program included storm water monitoring, receiving water monitoring, dry weather monitoring and sediment monitoring. The monitoring data indicate some spatial differences in water quality among Orange County's major watersheds. Based on these monitoring data, the monitoring program was revised in 1998 to focus on "warm spots" (areas where the pollutant concentrations were above the average for the watershed) and "special value" areas (critical aquatic resources). Another element of the monitoring program is the Reconnaissance and Source Identification component that targets areas that are known to exhibit unusually high levels of storm water pollutants. The 1998 monitoring program was approved and the data collection under this program will be completed by July 1, 2003. By January 1, 2003, the State Board is required by SB 72 (Water Code Section 13383.5) to develop a statewide municipal strom water monitoring program. By July 1, 2003, the permittees are required to develop a revised monitoring program as specified in the monitoring and reporting program and consistent with any new requirements developed by the State Board.

31. In accordance with the Strategic Plan and Initiatives ~~(June 22, 1995)~~ for the State and Regional Boards (June 22, 1995), the Regional Board recognizes the importance of an integrated watershed management approach. The Regional Board also recognizes that a watershed management program should integrate all related programs, including the storm water program and TMDL processes. Consistent with this approach, some of the monitoring programs have already been integrated into regional monitoring programs.

32. Illegal discharges[3] to the storm drains can contribute to storm water and other surface water contamination. A reconnaissance survey of the municipal storm drain systems (open channels

[3] Illegal discharge means any discharge (or seepage) to the municipal separate storm sewer that is not composed entirely of storm water except for the authorized discharges listed in Section III of this permit. Illegal discharges include the improper disposal of wastes into the storm sewer system.

and underground storm drains) was completed by the permittees. The permittees also developed a program to prohibit illegal/illicit discharges to their storm drains and flood control facilities. Continued surveillance and enforcement of these programs are required to eliminate illicit discharges. The permittees have a number of mechanisms in place to eliminate illicit discharges to the MS4s, including construction, commercial, and industrial facility inspections, drainage facility inspections, water quality monitoring programs, and public education. The permittees also established a 24-hour water pollution problem reporting hotline. In February 1997, the permittees certified that they had completed a reconnaissance survey of the MS4s to detect and eliminate any illegal connections (undocumented or unpermitted connections to the MS4s). A reconnaissance survey is now being conducted as a part of the routine inspections of all MS4s.

33. The permittees have the authority to control pollutants in storm water discharges, to prohibit illegal connections and illicit discharges, to control spills, and to require compliance and carry out inspections of the storm drain systems within their jurisdictions. The permittees have various forms of legal authority in place, such as charters, State Code provisions for General Law cities, city ordinances, and applicable portions of municipal codes and the State Water Code, to regulate storm water/urban runoff discharges. In order to insure countywide consistency and to provide a legal underpinning to the entire Orange County storm water program, a model water quality ordinance was completed on August 15, 1994 and was adopted by all the permittees. The permittees are required by this order to review their existing enforcement authority to determine whether any additional legal authority is needed in order for permittees to administer civil and/or criminal penalties in enforcement actions for violations of the Water Quality Ordinance.

34. –Pollution prevention techniques, appropriate planning processes, and early identification of potential storm water impacts and mitigation measures can significantly reduce storm water pollution problems. The permittees should consider these impacts and appropriate mitigation measures in the planning procedures and in the California Environmental Quality Act (CEQA) review process for specific projects, Master Plans, etc. The permittees already require a Water Quality Management Plan, which addresses permanent post-construction BMPs, in addition to the SWPPP, which is required by the statewide general permit for construction activity. The permittees are encouraged to propose and participate in watershed wide and/or regional water quality management programs.

~~35~~35. ——The permittees have developed inter-departmental training programs and have made commitments to conduct a certain number of these training programs during the term of this permit.

36. In accordance with the Clean Water Act and its implementing regulations, this order requires the permittees to develop and implement programs and policies necessary to reduce the discharge of pollutants in urban runoff to waters of the U. S. to the maximum extent practicable (MEP).

37. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the U.S. EPA were aware of the difficulties in regulating urban storm water runoff solely through traditional end-of-pipe treatment. However, it is the Regional Board's intent that this order require the implementation of best management practices to reduce to the maximum extent practicable, the discharge of pollutants in storm water from the MS4s in order to support

attainment of water quality standards. This order, therefore, includes Receiving Water Limitations based upon water quality objectives, the prevention of nuisance and the reduction of water quality impairment in receiving waters. In accordance with Section 402 (p) of the Clean Water Act, this order requires the permittees to implement control measures, in accordance with the approved DAMP, that will reduce pollutants in storm water discharges to the maximum extent practicable. The Receiving Water Limitations similarly require the implementation of control measures, to the extent that they are technically and economically feasible to protect beneficial uses and attain water quality objectives of the receiving waters.

38. The Regional Board finds that the unique aspects of the regulation of storm water discharges through municipal storm sewer systems, including the intermittent nature of discharges, difficulties in monitoring and limited physical control over the discharge, will require adequate time to implement and evaluate the effectiveness of BMPs. Therefore, the order includes a procedure for determining whether storm water discharges are causing exceedances of receiving water limitations and for evaluating whether the DAMP must be revised. The order establishes an iterative process to maintain compliance with the receiving water limitations.

39. The permittees are required to conduct inspections of construction sites, industrial facilities and commercial establishments. To avoid duplicative efforts, the permittees need not inspect facilities that have been inspected by Regional Board staff if the inspection was conducted during the specified time period. Regional Board staff inspection data will be posted regularly on its internet site. It is anticipated that many of the inspections required under this order can and will be carried out by inspectors currently conducting inspections for the permittees (i.e., grading, building, code enforcement, etc.), during their normal duties.

3940. A revised Water Quality Control Plan (Basin Plan) was adopted by the Regional Board and became effective on January 24, 1995. The Basin Plan contains water quality objectives and beneficial uses for water bodies in the Santa Ana Region. The Basin Plan also incorporates by reference all State Board water quality control plans and policies, including the 1990 Water Quality Control Plan for Ocean Waters of California (Ocean Plan) and the 1974 Water Quality Control Policy for Enclosed Bays and Estuaries of California (Enclosed Bays and Estuaries Plan).

4041. The requirements contained in this order are necessary to implement the plans and policies described in Finding 39, above. These plans and policies contain numeric and narrative water quality standards for the water bodies in this Region. This order requires permittees to comply with load allocations for constituents with established load allocations for urban runoff, by implementing the necessary BMPs. Continuation of water quality/biota monitoring and analysis of the data are essential to better understand the impacts of storm water discharges on the water quality of the receiving water. The existing Basin Plan, or any further changes to the Basin Plan, may be grounds for the permittees to revise some or all of the DAMP and/or the ROWD.

4142. Permittees will be required to comply with any applicable future water quality standards or discharge requirements that may be imposed by the EPA or State of California prior to the expiration of this order. This order may be reopened to include TMDLs and/or other requirements developed and adopted by the Regional Board.

4243. The permittees may petition the Regional Board to issue a separate NPDES permit to any discharger of non-storm water into storm drain systems that they own or operate.

4344. The permittees under the aegis of the TAC, and in collaboration with the City and County Attorneys, Orange County Sanitation District, the Orange County Building Industry Association, the Food Sanitation Advisory Council, and Western States Petroleum Association, developed an Enforcement Consistency Guide and a Water Quality Ordinance. All of the permittees adopted the Enforcement Consistency Guide and the Water Quality Ordinance. These documents establish legal authority for enforcing storm water ordinances and countywide uniformity in the enforcement actions.

4445. It is important to control litter to eliminate trash and other materials in storm water runoff. In addition to the municipal ordinances prohibiting litter, the permittees participate or organize a number of other programs such as "Coastal Cleanup Day", "Pride Days", "Volunteer Connection Day", etc. The permittees also organize solid waste collection programs, household hazardous waste collections, and recycling programs to reduce litter and illegal discharges. Additionally, the permittees have installed debris booms at a number of locations.

4546. The permittees are required to continue their drainage system inspection and maintenance program.

4647. At a number of locations along the Orange County coast, elevated bacterial levels were detected during the summer of 1999 and 2000. One of the studies conducted to determine the source of bacterial contamination indicated that there is only a minor contribution to the bacterial problems from urban runoff. The permittees currently divert dry weather low flows from some of these areas to sanitary sewer systems on a temporary basis to address this bacterial problem. A number of studies have been initiated to determine the source of this microbial contamination and to develop permanent remedial measures. This order requires the permittees to further investigate and address the coastal bacterial problems.

4748. The sampling data indicate the presence of elevated levels of pesticides in storm water runoff from urban areas. The permittees have developed and implemented a model plan entitled, "Management Guidelines for Use of Fertilizers and Pesticides". The permittees are required to review this plan to determine its effectiveness and to make any needed changes. TMDLs are being developed for some of these pesticides for the Newport Bay watershed.

4849. Public education is an important part of storm water pollution prevention. The permittees have employed a variety of means to educate the public, business and commercial establishments, industrial facilities and construction sites, and in 1999 developed a long term public education strategy. The permittees are required to continue their efforts in public education programs.

4950. The permittees established a taskforce consisting of the principal permittee, Building Industry Association, Association of General Contractors and Civil Engineers and Land Surveyors of California and developed "Best Management Practices for New Development Including Non-Residential Construction Projects (1-5 acres)". The permittees are implementing the BMPs from this guidance document and are requiring new developments and significant redevelopments to develop and implement appropriate Water Quality Management Plans. This order requires structural and non-structural BMPs for new developments and significant redevelopments only if adequate regional and/or watershed wide management programs are not being implemented.

~~50~~51. The Regional Board and the permittees recognize the importance of watershed management initiatives and regional planning and coordination in the development and implementation of programs and policies related to water quality protection. A number of such efforts are underway in which the permittees are active participants. This order encourages continued participation in such programs and policies. The Regional Board also recognizes that in certain cases, diversion of funds targeted for certain monitoring programs to regional monitoring programs may be necessary. The Executive Officer is authorized to approve the watershed management initiatives and regional planning and coordination programs and regional monitoring programs.

~~51~~52. The storm water regulations require public participation in the development and implementation of the storm water management program. As such, the permittees are required to solicit and consider all comments received from the public and submit copies of the comments to the Executive Officer of the Regional Board with the annual reports due on November 15. In response to public comments, the permittees may modify reports, plans, or schedules prior to submittal to the Executive Officer.

~~52~~53. In accordance with California Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.

~~53~~54. The permitted discharge is consistent with the anti-degradation provisions of 40 CFR 131.12 and the State Board Resolution 68-16. This order requires implementation of programs (i.e., BMPs) to reduce the level of pollutants in the storm water discharges. The combination of programs and policies required to be implemented under this order for new and existing developmens are designed to improve urban storm water quality.

~~54~~55. The Regional Board has notified the permittees and interested parties of its intent to issue waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

~~55~~56. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED that the permittees, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act, as amended, and regulations and guidelines adopted thereunder, shall comply with the following:

I. RESPONSIBILITIES OF PRINCIPAL PERMITTEE

The principal permittee shall be responsible for the overall program management and shall:

1. Conduct chemical and biological water quality monitoring, as required by the Executive Officer of the Regional Board.
2. Conduct inspections and maintain the storm drain systems within its jurisdiction.

3. Review and revise, if necessary, policies/ordinances necessary to establish legal authority as required by the Federal Storm Water Regulations.
4. Respond and/or arrange for responding to emergency situations, such as accidental spills, leaks, illicit discharges and illegal connections, etc., to prevent or reduce the discharge of pollutants to storm drain systems and waters of the U.S. within its jurisdiction.
5. Take appropriate enforcement actions for illicit discharges to the MS4 systems owned or controlled by the principal permittee.
6. Prepare and submit to the Executive Officer of the Regional Board unified reports, plans, and programs as required by this order, including the annual report.

The activities of the principal permittee shall include, but not be limited to, the following:

1. Coordinate and conduct Management Committee meetings on an as needed basis. The principal permittee will take the lead role in initiating and developing area-wide programs and activities necessary to comply with the NPDES Permit.
2. Coordinate permit activities and participate in any subcommittees formed as necessary to coordinate compliance activities with this order.
3. Provide technical and administrative support and inform the co-permittees of the progress of other pertinent municipal programs, pilot projects, research studies, etc.
4. Coordinate the implementation of area-wide storm water quality management activities such as public education, pollution prevention, household hazardous waste collection, etc.
5. Develop and implement mechanisms, performance standards, etc., to promote uniform and consistent implementation of BMPs among the permittees.
6. Pursue enforcement actions as necessary within its jurisdiction to ensure compliance with storm water management programs, ordinances and implementation plans, including physical elimination of undocumented connections and illicit discharges.
7. In conjunction with the other permittees, implement the BMPs listed in the approved DAMP.
8. Monitor the implementation of the plans and programs required by this order and determine their effectiveness in protecting beneficial uses.
9. Coordinate all the activities with the Regional Board, including the submittal of all reports, plans, and programs, as required under this order.
10. Obtain public input for any proposed management and implementation plans, where applicable.
11. Cooperate in watershed management programs and regional and/or statewide monitoring programs.

II. RESPONSIBILITIES OF THE CO-PERMITTEES

The co-permittees shall be responsible for the management of storm drain systems within their jurisdictions and shall:

1. Implement management programs, monitoring programs, implementation plans and all BMPs outlined in the DAMP within each respective jurisdiction.
2. Coordinate among their internal departments and agencies, as appropriate, to facilitate the implementation of this Order and the DAMP.
3. Establish and maintain adequate legal authority, as required by the Federal Storm Water Regulations.
4. Conduct storm drain system inspections and maintenance in accordance with the criteria developed by the principal permittee.
5. Take appropriate enforcement actions for illicit discharges to the MS4 system owned or controlled by the co-permittee.

The co-permittees' activities shall include, but not be limited to, the following:

1. Participate in a Management Committee comprised of the principal permittee and one representative of each co-permittee. The principal permittee will take the lead role in initiating and developing area-wide programs activities necessary to comply with the NPDES Permit. The committee will meet on a regular basis (at least six times per year). Each permittee shall designate one official representative to the Management Committee.
2. Review, approve, implement, and comment on all plans, strategies, management programs, and monitoring programs, as developed by the principal permittee or any permittee subcommittee to comply with this order.
3. Pursue enforcement actions as necessary to ensure compliance with the storm water management programs, ordinances and implementation plans, including physical elimination of undocumented connections and illicit discharges.
4. Conduct and coordinate with the principal permittee any surveys and characterizations needed to identify the pollutant sources and drainage areas.
5. Submit storm drain system maps with periodic revisions, as necessary.
6. Respond to emergency situations, such as accidental spills, leaks, illicit discharges and illegal connections, etc., to prevent or reduce the discharge of pollutants to storm drain systems and waters of the U.S.
7. Prepare and submit all required reports to the principal permittee in a timely manner.

III. DISCHARGE LIMITATIONS/PROHIBITIONS

1. In accordance with the requirements of 40 CFR 122.26(d)(2)(i)(B) and 40 CFR 122.26(d)(2)(i)(F), the permittees shall prohibit illicit/illegal discharges (non-storm water) from entering into the municipal separate storm sewer systems.
2. The discharge of storm water from the MS4s to waters of the United States containing pollutants that have not been reduced to the maximum extent practicable is prohibited.
3. The permittees shall effectively prohibit the discharge of non-storm water into the MS4s, unless such discharges are authorized by a separate NPDES permit or as otherwise specified in this provision. Certain discharges identified below need not be prohibited by the

permittees. If, however, any of these discharges are identified by the permittees or the Executive Officer as a significant source of pollutants, coverage under the Regional Board's De Minimus permit may be required.

a. Discharges composed entirely of storm water,

b. Potable water line flushing and other potable water sources,

c. Air conditioning condensate,

d. Landscape irrigation, lawn garden watering and other irrigation waters,

e. Passive foundation drains,

f. Passive footing drains,

g. Water from crawl space pumps,

h. Dechlorinated swimming pool discharges,

i. Non-commercial vehicle washing,

j. Diverted stream flows,

k. Rising ground waters and natural springs,

l. Ground water infiltration as defined in 40 CFR 35.2005 (20) and uncontaminated pumped groundwater,

m. Flows from riparian habitats and wetlands,

n. Emergency fire fighting flows (i.e., flows necessary for the protection of life and property) do not require BMPs and need not be prohibited. However, where possible, when not interferring with health and safety issues, BMPs should be considered (also see Section XIX, Provision 4);

o. Waters not otherwise containing wastes as defined in California Water Code Section 13050 (d), and

p. Other types of discharges identified and recommended by the permittees and approved by the Regional Board.

The Executive Officer may add categories of non-storm water discharges that are not significant sources of pollutants or remove categories of non-storm water discharges listed above based upon a finding that the discharges are a significant source of pollutants.

4. For purposes of this order, a discharge may include storm water or other types of discharges, identified in Item 3, above.

5. Non-storm water discharges from public agency activities into waters of the U.S. are prohibited unless the non-storm water discharges are permitted by an NPDES permit or are included in Item 3., above. If permitting or immediate elimination of the non-storm water discharges is impractical, the permittees shall include in the Environmental Performance Report, a proposed plan to eliminate the non-storm water discharges in a timely manner.

6. The permittees shall reduce the discharge of pollutants, including trash and debris, from the storm water conveyance systems to the maximum extent practicable.

7. Discharges from the MS4s shall be in compliance with the applicable discharge prohibitions contained in Chapter 5 of the Basin Plan.

IV. RECEIVING WATER LIMITATIONS

1. Discharges from the MS4s shall not cause exceedances of receiving water quality standards (designated beneficial uses and water quality objectives) for surface waters or groundwaters.
2. Discharges from the MS4s of storm water, or non-storm water, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance, as that term is defined in Section 13050 of the Water Code.
3. The DAMP and its components shall be designed to achieve compliance with receiving water limitations. The permittees shall comply with Sections III.2 and IV of this order through timely implementation of control measures and other actions to reduce pollutants in urban storm water runoff to the maximum extent practicable in accordance with the DAMP and other requirements of this order, including any modifications thereto.
4. If permittees continue to cause or contribute to an exceedance of water quality standards, notwithstanding implementation of the DAMP and other requirements of this order, the permittees shall assure compliance with Sections III.2 and IV of this order by complying with the following procedure:
   a. Upon a determination by either the permittees or the Executive Officer that the discharges from the MS4 systems are causing or contributing to an exceedance of an applicable water quality standard, the responsible permittee shall promptly notify and thereafter submit a report to the Executive Officer that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report may be incorporated in the annual update to the DAMP, unless the Executive Officer directs an earlier submittal. The report shall include an implementation schedule. The Executive Officer may require modifications to the report;
   b. Submit any modifications to the report required by the Executive Officer within 30 days of notification;
   c. Within 30 days following approval by the Executive Officer of the report described above, the permittees shall revise the DAMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required;
   d. Implement the revised DAMP and monitoring program in accordance with the approved schedule.

   So long as the permittees have complied with the procedures set forth above and are implementing the revised DAMP, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless the Executive Officer determines it is necessary to do so in order to satisfy the maximum extent practicable standard.

V. IMPLEMENTATION AGREEMENT

1. By July 1, 2002, the existing Implementation Agreement shall be revised to include the cities that were not signatories to this agreement. A copy of the signature page and any revisions to the Agreement shall be included in the annual report.
2. By July 1, 2002, the permittees shall evaluate the storm water management structure and the Implementation Agreement and determine the need for any revision. The corresponding annual report shall include the findings of this review and a schedule for any needed revisions.

VI. LEGAL AUTHORITY/ENFORCEMENT

1. The permittees shall maintain and enforce adequate legal authority to control the contribution of pollutants to the MS4 by storm water discharges associated with industrial activities.
2. The permittees shall take appropriate enforcement actions against any violators of their Water Quality Ordinance, in accordance with the adopted/established guidelines and procedures. All enforcement actions shall be consistent with the Enforcement Consistency Guide.
3. Permittees' ordinances or other local regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include but are not limited to: monetary penalties, non-monetary penalties, bonding requirements, and/or permit denials/revocations/stays for non-compliance. If the permittees' current ordinances do not have a provision for civil or criminal penalties for violations of their water quality ordinances, the permittees shall enact such ordinances by November 15, 2003.
4. By November 15, 2003, each permittee shall submit a statement, signed by legal counsel, that the permittee has obtained all necessary legal authority to comply with this Order through adoption of ordinances and/or municipal code modifications.
5. The permittees shall continue to provide notification to Regional Board staff regarding storm water related information gathered during site inspections of industrial and construction sites regulated by the Statewide General Storm Water Permits and at sites that should be regulated under the State's General Permits. The notification should include any observed violations of the General Permits, prior history of violations, any enforcement actions taken by the permittee, and any other relevant information.
6. By July 1, 2003, the permittees shall review the ordinances establishing legal authority to determine the effectiveness of these ordinances in prohibiting the following types of discharges to the MS4s and include in the report identified in Item 4, above (the permittees may propose appropriate control measures in lieu of prohibiting these discharges, where the permittees are responsible for ensuring that dischargers adequately maintain those control measures):

   ~~a.~~c. Sewage, where a co-permittee operates the sewage collection system;

~~b.~~f. Wash water resulting from the hosing or cleaning of gas stations, auto repair garages, and other types of automobile service stations;

~~c.~~g. Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, concrete mixing equipment, portable toilet servicing, etc.;

~~d.~~h. Wash water from mobile auto detailing and washing, steam and pressure cleaning, carpet cleaning, and other such mobile commercial and industrial activities;

~~e.~~i. Water from cleaning of municipal, industrial, and commercial sites, including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;

~~f.~~j. Runoff from material storage areas or uncovered receptacles that contain chemicals, fuels, grease, oil, or other hazardous materials;

~~g.~~k. Discharges of runoff from the washing of toxic materials from paved or unpaved areas;

~~h.~~l. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; pool filter backwash containing debris and chlorine;

~~i.~~m. Pet waste, yard waste, litter, debris, sediment, etc.;

~~j.~~n. Restaurant or food processing facility wastes such as grease, floor mat and trash bin wash water, food waste, etc.

~~7.~~7. The Principal Permittee shall, on or before July 1, 2002, develop a restaurant inspection program which shall, at a minimum, address:

a. Oil and grease disposal to verify that these was~~i~~tes are not poured onto a parking lot, street or adjacent catch basin;

b. Trash bin areas to verify that these areas are clean, the bin lids are closed, the bins are not filled with liquid, and the bins have not been washed out;

c. Parking lot, alley, sidewalk and street areas to verify that floormats, filters and garbage containers are not washed in those areas and that no washwater is poured in those areas;

d. Parking lot areas to verify that they are cleaned by sweeping, not by hosing down and that the facility operator uses dry methods for spill cleanup; and,

e. Inspection of existing devices designed to separate grease from wastewater (e.g., grease traps or interceptors) to ensure adequate capacity and proper maintenance.

VII. ILLEGAL CONNECTIONS; LITTER, DEBRIS AND TRASH CONTROL

1. The permittees shall continue to prohibit all illegal connections to the MS4s through their ordinances, inspections, and monitoring programs. If routine inspections or dry weather monitoring indicate any illegal connections, they shall be investigated and eliminated or permitted within 120 days of discovery and identification.

2. All reports of spills, leaks, and/or illegal dumping shall be promptly investigated and, where appropriate, reported to the Executive Officer within 24 hours (those incidents which may

pose an immediate threat to human health or the environment; (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.) by phone or e-mail, with a written report within 5 days. At a minimum, all sewage spills above 1,000 gallons and all reportable quantities of hazardous waste spills as per 40CFR 117 and 302 shall be reported within 24 hours and all other spill incidents shall be included in the annual report. The permittees may propose a reporting program, including reportable incidents and quantities, jointly with other agencies, such as the County Health Care Agency, for approval by the Executive Officer.

3. The permittees shall continue to implement appropriate control measures to reduce and/or to eliminate the discharge of trash and debris to waters of the U.S. These control measures shall be reported in the annual report.

4. By July 1, 2003, the permittees shall review their litter/trash control ordinances to determine the need for any revision. The permittees are encouraged to characterize trash, determine its main source(s), and develop and implement appropriate BMPs to control trash in urban runoff. The findings of this review shall be included in the annual report for 2002-2003.

5. By July 1, 2003, the permittees shall determine the need for any additional debris control measures. The findings shall be included in the annual report for 2002-2003.

VIII. MUNICIPAL INSPECTIONS OF CONSTRUCTION SITES

1. Each permittee shall develop by October 15, 2002, an inventory of all construction sites within its jurisdiction for which building or grading permits are issued and activities at the site include: soil movement; uncovered storage of materials or wastes, such as dirt, sand, or fertilizer; or exterior mixing of cementaceous products, such as concrete, mortar, or stucco. Sites will be included regardless of whether the construction site is subject to the California Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities (General Permit), or other individual NPDES permit. This database shall be updated prior to each rainy season thereafter. This inventory shall be maintained in a computer-based database system and shall include relevant information on site ownership, General Permit WDID # (if any), size, location, etc. Inclusion of a Geographical Information System (GIS) is recommended but not required.

2. To establish priorities for inspection requirements under this Order, the permittees shall prioritize construction sites within their jurisdiction as a high, medium, or low threat to water quality. Evaluation of construction sites should be based on such factors as soil erosion potential, project size, proximity and sensitivity of receiving waters and any other relevant factors. At a minimum, high priority construction sites shall include: sites over 50 acres; sites over 5 acres that are tributary to Clean Water Act section 303(d) waters listed for sediment or turbidity impairments; and sites that are tributary to an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS) and are within 500 feet of that ASBS.

3. Each permittee shall conduct construction site inspections for compliance with its ordinances (grading, Water Quality Management Plans, etc.) and local permits (construction, grading, etc.). Inspections shall include a review of erosion control and BMP implementation plans and an evaluation of the effectiveness and maintenance of the BMPs identified. Inspection frequency will, at a minimum, include the following:

   a. During the wet season (i.e., October 1 through April 30 of each year), all high priority sites are to be inspected, in their entirety, once a month. All medium priority sites are to be inspected at least twice during the wet season. All low priority sites are to be inspected at least once during the wet season. When BMPs or BMP maintenance is deemed inadequate or out of compliance, an inspection frequency of once every week will be maintained until BMPs and BMP maintenance are brought into compliance. During the 2001-2002 wet season, prior to the development of the inventory database, all construction sites must be visited at least twice. If a site is deemed out of compliance, an inspection frequency adequate to bring the site into compliance must be maintained.

   b. During the dry season (i.e., May 1 through September 30 of each year), all construction sites shall be inspected at a frequency sufficient to ensure that sediment and other pollutants are properly controlled and that unauthorized, non-storm water discharges are prevented.

   c. Information including, at a minimum, inspection dates, inspectors present and the results of the inspection must be maintained in the database identified in Item 1, above, or must be linked to that database. A copy of this database must be provided to the Regional Board with each annual report.

4. Each permittee shall enforce its ordinances and permits at all construction sites as necessary to maintain compliance with this Order. Sanctions for non-compliance must include: monetary penalties, bonding requirements and/or permit denial or revocation

5. Within 24 hours of discovery, each permittee shall provide oral or e-mail notification to the Santa Ana Regional Water Quality Control Board of non-compliant sites~~,~~ within their jurisdiction~~,~~ that are determined to pose a threat to human health or the environment ~~;~~(e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted to the Santa Ana Regional Water Quality Control Board within 10 days, detailing the nature of the non-compliance, any corrective action taken by the site owner, other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, site owner responsiveness) and the type of enforcement that will be carried out by the permittee. Further, incidences of non-compliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the database identified in Items 1 and 3c, above, or must be linked to these databases.

6. The inspectors responsible for ensuring compliance at construction sites shall be trained in and have an understanding of: federal, state and local water quality laws and regulations as they apply to construction and grading activities; the potential effects of construction and urbanization on water quality; and implementation and maintenance of erosion control

BMPs and sediment control BMPs and the applicable use of both. Each permittee shall have adequately trained its inspection staff by October 15, 2002, and on an annual basis, prior to the rainy season, thereafter. Training programs should be coordinated with the Santa Ana Regional Water Quality Control Board and prior notification of training shall be provided to Regional Board staff. New hires or transfers that will be performing construction inspections for the permittees must be trained within one month of starting inspection duties.

7. The permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period.

IX. MUNICIPAL INSPECTIONS OF INDUSTRIAL FACILTIES

1. Each permittee shall develop by July 1, 2003, an inventory of industrial facilities within its jurisdiction with business permits or other authorization by permittees, that have the potential to discharge pollutants to the MS4. Facilities will be listed, regardless of whether the facility is subject to the California Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (General Industrial Permit), or other individual NPDES permit. This database must be updated on an annual basis. This inventory must be maintained in a computer-based database system and must include relevant information on ownership, SIC code(s), General Industrial Permit WDID # (if any), size, location, etc. Inclusion of a Geographical Information System (GIS) is recommended but not required.
2. To establish priorities for inspection requirements under this Order, the permittees shall prioritize industrial facilities within their jurisdiction as a high, medium, or low threat to water quality. Evaluation of these facilities should be based on such factors as type of industrial activities (SIC codes), materials or wastes used or stored outside, pollutant discharge potential, facility size, proximity and sensitivity of receiving waters and any other relevant factors. At a minimum, a high priority shall be assigned to: facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); facilities requiring coverage under the General Industrial Permit; facilities with a high potential for or history of unauthorized, non-storm water discharges and~~,~~ facilities that are tributary to and within 500 feet of an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS). ~~and are within 500 feet of that ASBS.~~
3. Each permittee shall conduct industrial facility inspections for compliance with its ordinances and permits. Inspections shall include a review of material and waste handling and storage practices, pollutant control BMP implementation and maintenance and evidence of past or present unauthorized, non-storm water discharges. All high priority facilities identified in IX.2 shall be inspected by July 1, 2003.
4. After July 1, 2003, all high priority sites are to be inspected at least once a year ; all medium priority sites are to be inspected at least once every two years; and all low priority sites are to be inspected at least once per permit cycle. In the event that inappropriate material or waste handling or storage practices are observed, or there is evidence of past or present unauthorized, non-storm water discharges, an inspection frequency adequate to bring the site into compliance must be maintained (at a minimum, once a month). Once compliance is

achieved, a minimum inspection frequency of once every four months will be maintained for the next calendar year.

5. By July 1, 2005, each permittee shall identify the remaining industrial facilities that do not have business permits or other authorization by the permittees. These facilities shall be added to the database identified in Section IX.1 and shall be prioritized in accordance with the specifications identified in Section IX.2.

6. Information including, at a minimum, inspection dates, inspectors present and the results of the inspection must be maintained in the database identified in Item 1, above, or must be linked to that database. A copy of this database must be provided to the Regional Board with each annual report.

7. Each permittee shall enforce its ordinances and permits at all industrial facilities as necessary to maintain compliance with this Order. Sanctions for non-compliance must include: monetary penalties, bonding requirements and/or permit denial or revocation.

8. Within 24 hours, each permittee shall provide oral or e-mail notification to the Santa Ana Regional Water Quality Control Board of non-compliant facilities, within their jurisdiction, that are determined to pose a threat to human health or the environment ;(e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild–life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted to the Santa Ana Regional Water Quality Control Board within 10 days, detailing the nature of the non-compliance, any corrective action taken by the site owner, other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, facility owner responsiveness) and the type of enforcement that will be carried out by the permittee. Further, incidences of non-compliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident, in the database identified in Section IX.1.

9. The inspectors responsible for ensuring compliance at industrial facilities shall be trained in and have an understanding of: federal, state and local water quality laws and regulations as they apply to industrial activities; the potential effects of industrial discharges and urbanization on water quality; and implementation and maintenance of pollutant control BMPs. Each permittee shall have adequately trained their inspection staff by July 1, 2003, and on an annual basis thereafter. Training programs should be coordinated with the Santa Ana Regional Water Quality Control Board and prior notification of training shall be provided to Regional Board staff. New hires or transfers that will be performing industrial and commercial inspections for the permittees must be trained within one month of starting inspection duties.

10. The permittees need not inspect facilities already inspected by Regional Board staff, if the inspection was conducted within the specified time period.

X. MUNICIPAL INSPECTIONS OF COMMERCIAL FACILITIES

1. Each permittee shall develop by July 1, 2003, an inventory of the following commercial facilities/companies listed below within its jurisdiction. This database must be updated on

an annual basis. This inventory must be maintained in a computer-based database system and must include relevant information on ownership, size, location, etc. Inclusion of a Geographical Information System (GIS) is recommended but not required.

a. Automobile mechanical repair, maintenance, fueling, or cleaning;

b. Automobile and other vehicle body repair or painting;

c. Mobile automobile or other vehicle washing;

d. Mobile carpet, drape or furniture cleaning;

e. Mobile high pressure or steam cleaning;

f. Painting and coating;

g. Nurseries and greenhouses;

h. Landscape and hardscape installation;

i. Pool, lake and fountain cleaning;

j. Other commercial sites/sources that the Permittee determines may contribute a significant pollutant load to the MS4; and,

k. Any commercial sites or sources that are tributary to and within 500 feet of an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS). ~~and are within 500 feet of that ASBS.~~

2. To establish priorities for inspection requirements under this Order, the permittees shall prioritize commercial facilities/companies within their jurisdiction as a high, medium, or low threat to water quality based on such factors as the type, magnitude, and location of the commercial activity, potential for discharge of pollutants to the MS4, and any history of unauthorized non-storm water discharges.

3. Each permittee shall conduct commercial facility inspections for compliance with its ordinances and permits. Inspections shall include a review of material and waste handling and storage practices, pollutant control BMP implementation and maintenance and evidence of past or present unauthorized, non-storm water discharges.

4. After July 1, 2003, each permittee shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in X.2. In the event that inappropriate material or waste handling or storage practices are observed, or there is evidence of past or present unauthorized, non-storm water discharges, an inspection frequency adequate to bring the site into compliance must be maintained.

5. By July 1, 2004, all high priority sites shall be inspected at least once.

6. Information including, at a minimum, inspection dates, inspectors present and the results of the inspection must be maintained in the database identified in Item 1, above, or must be linked to that database. A copy of this database must be provided to the Regional Board with each annual report.

7. Each permittee shall enforce its ordinances and permits at commercial facilities. Sanctions for non-compliance must include: monetary penalties, bonding requirements and/or permit denial or revocation.

8. Within 24 hours, each permittee shall provide oral or e-mail notification to the Santa Ana Regional Water Quality Control Board of non-compliant facilities, within their jurisdiction, that are determined to pose a threat to human health or the environment ; (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wild-life, a hazardous substance spill where residents are evacuated, etc.). Following oral notification, a written report must be submitted to the Santa Ana Regional Water Quality Control Board within 5 days. For incidents that do not pose a threat to human or environmental health, the permittees shall submit a written report within 30 days of the incident. All written reports shall detail the nature of the non-compliance, identify any corrective action taken by the site owner, and note other relevant information (e.g., past history of non-compliance, environmental damage resulting from the non-compliance, facility owner responsiveness) and the type of enforcement that will be carried out by the permittee. Further, incidences of non--compliance shall be recorded along with the information noted in the written report and the final outcome/enforcement for the incident in the database identified in Section X.1.

9. The inspectors responsible for ensuring compliance at commercial facilities shall be trained in and have an understanding of: federal, state and local water quality laws and regulations as they apply to industrial and commercial activities; the potential effects of industrial discharge and urbanization on water quality; and, implementation and maintenance of pollutant control BMPs. Each permittee shall have adequately trained their inspection staff by July 1, 2003 and on an annual basis thereafter. Training programs should be coordinated with the Santa Ana Regional Water Quality Control Board and prior notification of training shall be provided to Regional Board staff. New hires or transfers that will be performing commercial inspections for the permittees must be trained within one month of starting inspection duties.

10. The permittees need not inspect facilities already inspected by Regional Board staff if the inspection was conducted within the specified time period.

XI. SEPTIC SYSTEM FAILURES AND PORTABLE TOILET DISCHARGES

1. By July 1, 2003, the permittees whose jurisdictions have 50 or more septic tank sub-surface disposal systems in use shall identify with the appropriate governing agency a mechanism to determine the effect of septic system failures on storm water quality and a mechanism to address such failures.
2. By July 1, 2003, the principal permittee shall review the permittees' current oversight programs for portable toilets to determine the need for any revision.

XII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT RE-DEVELOPMENT)

A. GENERAL REQUIREMENTS:

1. By July 1, 2002, the permittees shall establish a mechanism to ensure (prior to issuance of any local permits or other approvals) that all construction sites that are required to obtain coverage under the State's General Storm Water Permit for construction sites have filed with the State Board a Notice of Intent to be covered by the relevant ~~G~~general ~~P~~permit.
2. Each permittee shall minimize the short and long-term impacts on receiving water quality from new developments and re-developments, as required in Section B. 1., below. In order to reduce pollutants and runoff flows from new developments and re-developments to the maximum extent practicable, permittees should, at a minimum:
   a. Review General Plan/CEQA Processes
   b. ~~-~~Modify the Project Approval Process
   c. Conduct Public/Business Education
3. By December 19, 2002, the permittees should review their planning procedures and CEQA document preparation processes to ensure that urban runoff-related issues are properly considered and addressed. If necessary, these processes should be revised by that date to consider and mitigate impacts to storm water quality. These changes may include revising the General Plan, modifying the project approval processes, including a section on urban runoff related water quality issues in an addendum CEQA checklist, and conducting training for project proponents. The actions taken by the permittees shall be reported to the Regional Board by January 2, 2003. The following potential impacts shall be considered during CEQA review:
   a. Potential impact of project construction on storm water runoff.
   b. Potential impact of project's post-construction activity on storm water runoff.
   c. Potential for discharge of storm water pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.
   d. Potential for discharge of storm water to affect the beneficial uses of the receiving waters.

e. Potential for significant changes in the flow velocity or volume of storm water runoff to cause environmental harm.

f. Potential for significant increases in erosion of the project site or surrounding areas.

4. By July 1, 2004, the permittees should incorporate watershed protection principles and policies into the General Plan or related documents (such as Development Standards, Zoning Codes, Conditions of Approval, Development Project Guidance) and provide proof of such action in the 2004 annual report. These principles and policies should include, but not be limited to, the following considerations:

   a. Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; minimize impacts from storm water and urban runoff on the biological integrity of natural drainage systems and water bodies;

   b. Minimize changes in hydrology and pollutant loading; require incorporation of controls, including structural and non-structural BMPs, to mitigate the projected increases in pollutant loads and flows; ensure that post-development runoff rates and velocities from a site have no significant adverse impact on downstream erosion and stream habitat; minimize the quantity of storm water directed to impermeable surfaces and the MS4s; maximize the percentage of permeable surfaces to allow more percolation of storm water into the ground;

   c. Preserve wetlands, riparian corridors, and buffer zones; establish reasonable limits on the clearing of vegetation from the project site;

   d. Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible;

   e. Provide for appropriate permanent measures to reduce storm water pollutant loads in storm water from the development site;

   f. Establish development guidelines for areas particularly susceptible to erosion and sediment loss.

5. Each permittee shall provide the Regional Board with the draft amendment or revision when a pertinent General Plan element or the General Plan is noticed for comment in accordance with Govt. Code § 65350 et seq.

6. By July 1, 2003, the permittees should review and revise their current grading/erosion control ordinances in order to reduce erosion caused by new development or significant re-development projects.

7. The permittees should , through conditions of approval, ensure proper maintenance and operation of any permanent flood control structures installed in new developments. The parties responsible for the maintenance and operation of the facilities, and a funding mechanism for operation and maintenance, should be identified prior to approval of the project.

8. By November 15, 2003, the principal permittee shall submit a proposal for a study to evaluate the effectiveness of a group of selected BMPs for controlling erosion during

new development. This proposal shall include details of the new development project site, the BMPs selected for the study, and a proposed schedule to complete the study by the end of this permit term.

9. The permittees shall continue to implement the new development BMPs (DAMP, Appendix G) and BMPs for public works construction (DAMP, Appendix H).

10. Within six months of adoption of this order, the permittees shall review their DAMP to determine the need for:

    a. Re-establishing the New Development Task Force

    b. Establishing a Water Quality Plan verification program.

B. WATER QUALITY MANAGEMENT PLAN (WQMP) FOR URBAN RUNOFF (FOR NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT):

1. By March 1, 2003, the permittees shall review their existing BMPs for New Developments (Appendix G of the DAMP) and submit for review and approval by the Executive Officer, a revised WQMP for urban runoff from new developments/significant re-developments for the type of projects listed below:

    a. All significant re-development projects, where significant re-development is defined as the addition of 5,000 or more square feet of impervious surface on an already developed site. This includes additional buildings and/or structures, extension of existing footprint of a building, construction of parking lots, etc.

    b. Home subdivisions of 10 units or more. This includes single family residences, multi-family residences, condominiums, apartments, etc.

    c. Commercial developments of 100,000 square feet or more. This includes non-residential developments such as hospitals, educational institutions (to the extent the permittees have authority to regulate these developments), recreational facilities, mini-malls, hotels, office buildings, warehouses, and light industrial facilities.

    d. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532-7534, 7536-7539).

    e. Restaurants where the land area of development is 5,000 square feet or more.

    f. All hillside developments on 10,000 square feet or more which are located on areas with known erosive soil conditions or where the natural slope is twenty-five percent or more.

    g. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.

    h. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as a land area or facility for the temporary storage of motor vehicles.

2. The permittees are encouraged to include in the WQMP the development and implementation of regional and/or watershed management programs that address runoff from new development and significant re-development. The WQMP shall include

BMPs for source control, pollution prevention, and/or structural treatment BMPs. For all structural treatment controls, the WQMP shall identify the responsible party for maintenance of the treatment system, and a funding source or sources for its operation and maintenance. The goal of the WQMP is to develop and implement practicable programs and policies to minimize the effects of urbanization on site hydrology, urban runoff flow rates or velocities and pollutant loads. This goal may be achieved through watershed-based structural treatment controls, in combination with site-specific BMPs. The WQMP shall reflect consideration of the following goals, which may be addressed through on-site-and/or watershed-based BMPs.

a. The pollutants in post-development runoff shall be reduced using controls that utilize best available technology (BAT) and best conventional tecnology (BCT).

b. The discharge of any listed pollutant to an impaired waterbody on the 303(d) list shall not cause an exceedence of receiving water quality objectives.

3. During the time that the WQMP is being revised, the permittees shall implement their existing requirements for new development (Appendix G of the DAMP). If the Executive Officer does not approve the revised WQMP by October 1, 2003, as meeting the goals proposed in XII.B.2, above and providing an equivalent or superior degree of treatment as the sized criteria outlined in XII.B.3, below, structural BMPs shall be required for all new development and significant redevelopment[4]. Minimum structural BMPs must either be sized to comply with one of the following numeric sizing criteria or be deemed by the Principal Permittee to provide equivalent or superior treament, either on a site basis or a watershed basis:

   A. Volume

   Volume–based BMPs shall be designed to infiltrate, filter, or treat either:

   1. The volume of runoff produced from a 24-hour, 85th percentile storm event, as determined from the local historical rainfall record; or
   2. The volume of annual runoff produced by the 85th percentile, 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87 (1998); or
   3. The volume of annual runoff based on unit basin storage volume, to achieve 80% or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/Commercial (1993); or

[4] Where new development is defined as projects for which tentative tract or parcel map approval was not received by July 1, 2003 and new re-development is defined as projects for which all necessary permits were not issued by July 1, 2003. New development does not include projects receiving map approvals after July 1, 2003 that are proceeding under a common scheme of development that was the subject of a tentative tract or parcel map approval that occurred prior to July 1, 2003.

4. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile, 24-hour runoff event;

OR

B. Flow

Flow-based BMPs shall be designed to infiltrate, filter, or treat either:

1. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or
2. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
3. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

C. Groundwater Protection

Any structural infiltration BMPs shall meet the following minimum requirements:

1. Use of structural infiltration treatment BMPs shall not cause or contribute to an exceedance of groundwater water quality objectives.
2. Source control and pollution prevention control BMPs shall be implemented to protect groundwater quality.
3. Structural infiltration treatment BMPs shall not cause a or pollution, as defined in Water Code Section 13050 .

4. The permittees may propose any equivalent sizing criteria for treatment BMPs or other controls that will achieve greater or substantially similar pollution control benefits. In the absence of approved equivalent sizing criteria, the permittees shall implement the above stated sizing criteria.

5. If a particular BMP is not technically feasible, other BMPs should be implemented to achieve the same level of compliance, or if the cost of BMP implementation greatly outweighs the pollution control benefits, the permittees may grant a waiver of the numeric sizing criteria. All waivers, along with waiver justification documentation, must be reported to the Regional Board in writing within 30 days. The permittees may propose to establish an urban runoff fund to be used for urban water quality improvement projects within the same watershed that is funded by contributions from developers granted waivers. If it is determined by the Regional Board that waivers are being inappropriately granted, this Order may be reopened to modify these waiver conditions.

6. The obligation to install minimum structural BMPs at new development is met if, for a common scheme of development, BMPs are constructed with the requisite capacity to

serve the entire common scheme, even if cerain phases of the common scheme may not have BMP capacity located on that phase in accordance with the requirements specified above.

XIII. PUBLIC EDUCATION AND OUTREACH

1. The permittees shall continue to implement the public education efforts already underway and shall implement the most effective elements of the comprehensive public and business education strategy contained in the Report of Waste Discharge/DAMP. By July 1, 2002, the permittees shall complete a public awareness survey to determine the effectiveness of the current public and business education strategy and provide a future action plan.
2. When feasible, the permittees shall participate in joint outreach with other programs including, but not limited to, the State of California Storm Water Quality Task Force, Caltrans, and other municipal storm water programs to ensure that a consistent message on storm water pollution prevention is disseminated to the public. The permittees shall sponsor or staff a storm water table or booth at community, regional, and/or countywide events to distribute public education materials to the public. Each permittee shall participate in at least one event per year.
3. By March 1, 2002, the permittees shall establish a Public Education Committee to provide oversight and guidance for the implementation of the public education program. The Public Education Committee shall meet at least twice per year. The Public Education Committee shall make recommendations for any changes to the public and business education program. The goal of the public and business education program shall be to target 100% of the residents, including businesses, commercial and industrial establishments. Through use of local print, radio and television, the permittees must ensure that the public and business education program makes a minimum of 10 million impressions per year. By July 1, 2002, the Public Education Committee shall develop BMP guidance for restaurants, automotive service centers, and gasoline service stations for the industrial facility inspectors to distribute to these facilities during inspections. Further, for restaurant, automotive service centers, and gasoline service station corporate chains, information is to be developed that will be provided to corporate environmental managers during outreach visits that will take place twice during the permit term.
4. By July 1, 2002, the permittees shall develop public education materials to encourage the public to report (including a hotline number and web site to report) illegal dumping and unauthorized, non-storm water discharges from residential, industrial, construction and commercial sites into public streets, storm drains and other waterbodies; clogged storm drains; faded or missing catch basin stencils and general storm water and BMP information. This hotline and web site shall be included in the public and business education program and shall be listed in the governmental pages of all regional phone books.
5. By July 1, 2003, the permittees shall develop BMP guidance for the control of those potentially polluting activities not otherwise regulated by any agency including guidelines for the household use of fertilizers, pesticides, herbicides, and other chemicals; and guidance for mobile vehicle maintenance, carpet cleaners, commercial landscape maintenance, and

pavement cutting. These guidance documents shall be distributed to the public, trade associations, etc., through participation in community events, trade association meetings, and/or mail.

6. By July 1, 2003, the permittees shall conduct an evaluation to determine the best method of establishing a mechanism(s) for providing educational and General Industrial Permit materials to businesses within their jurisdiction.

XIV. MUNICIPAL FACILITIES/ACTIVITIES

1. Each permittee shall implement the recommendations in the Environmental Performance Report to ensure that public agency facilities and activities do not cause or contribute to a pollution or nuisance in receiving waters. By July 1 of each year, the permittees shall review all their activities and facilities to determine the need for any revisions to the Environmental Performance Reports. The annual report shall include the findings of this review and a schedule for any needed revisions. All revisions should consider a pollution prevention strategy to ensure that the public agency facilities and/or activities that are currently not required to obtain coverage under the State's general storm water permits reduce the discharge of pollutants into the waters of the U.S. to the maximum extent practicable.
2. By July 1, 2003, the permittees shall complete an assessment of their flood control facilities to evaluate opportunities to configure and/or to reconfigure channel segments to function as pollution control devices and to optimize beneficial uses. These modifications may include in-channel sediment basins, bank stabilization, water treatment wetlands, etc. This shall be reported in the 2002-2003 annual report.
3. By July 1, 2002, the principal permittee shall develop and distribute model maintenance procedures for public agency activities such as street sweeping, catch basin stenciling, drainage facility maintenance, etc. This shall be reported in the 2001-2002 annual report.
4. By July 1, 2002, the principal permittee shall develop and distribute BMP guidance for public agency and contract field operations and maintenance staff to provide guidance in appropriate pollution control measures, how to respond to spills and reports of illegal discharges, etc. This shall be reported in the 2001-2002 annual report.
5. At least on an annual basis, the principal permittee shall provide training to public agency staff and to contract field operations staff on fertilizer and pesticide management, model maintenance procedures, implementation of environmental performance reporting program and other pollution control measures. Each permittee shall attend at least three of these training sessions during the five year term of this permit (from 2001 to 2006).
6. By July 1, 2002, the principal permittee shall develop a model maintenance procedure for drainage facilities. This shall be included in the 2001-2002 annual report. Each permittee shall inspect and maintain at least 80% of its drainage facilities on an annual basis, with 100% of the facilities included in a two-year period, using the model maintenance procedures developed by the principal permittee. This shall be included in the annual report.
7. By July 1, 2004, the permittees shall develop and submit for approval by the Executive Officer, a more aggressive program for cleaning out drainage facilities, including catch

basins. This program should be based on a list of drainage facilities, prioritized on such factors as distance to receiving water, receiving water beneficial uses and impairments of beneficial uses, historical pollutant types and loads from past inspections/cleanings, and the presence of downstream regional facilities that would remove the types of pollutants found in the drainage facility. Using this list, the permittees shall propose clean out schedules for all drainage facilities with a minimum frequency of once a year and a maximum frequency of monthly, during the storm season. The permittees should be prepared to implement the approved clean out program beginning with the 2004-2005 storm season.

8. By July 1, 2002, the permittees shall evaluate the applicability of the Environmental Performance Program to municipal maintenance contracts, contract for field maintenance operations, and leases. This shall be included in the 2001-2002 annual report.

XV. MUNICIPAL CONSTRUCTION PROJECTS/ACTIVITIES

1. This order authorizes the discharge of storm water runoff from construction projects that may result in land disturbance of five (5) acres or more (or less than five acres, if it is part of a larger common plan of development or sale which is five acres or more) that are under ownership and/or direct responsibility of any of the permittees. All permittee construction activities shall be in accordance with DAMP, Appendix H.
2. Prior to commencement of construction activities, the permittees shall notify the Executive Officer of the Regional Board of the proposed construction project. Upon completion of the construction project, the Executive Officer shall be notified of the completion of the project.
3. The permittees shall develop and implement a storm water pollution prevention plan (SWPPP) and a monitoring program that is specific for the construction project, prior to the commencement of any of the construction activities. The SWPPP shall be kept at the construction site and released to the public and/or Regional Board staff upon request.
4. The SWPPP and the monitoring program for the construction projects shall be consistent with the requirements of the latest version of the State's General Construction Activity Storm Water Permit.
5. The permittees shall give advance notice to the Executive Officer of the Regional Board of any planned changes in the construction activity, which may result in non-compliance with the latest version of the State's General Construction Activity Storm Water Permit.
6. All other terms and conditions of the latest version of the State's General Construction Activity Storm Water Permit shall be applicable.

XVI. SUB-WATERSHEDS AND TMDL IMPLEMENTATION

1. The permittees shall meet the following target load allocations for nutrients in urban runoff by implementing the BMPs contained in Appendix N (DAMP, Section 12) and in accordance with the approved implementation plan.

(This section intentionally left blank.)

Table 1. Seasonal Load Allocations of Total Nitrogen for the Newport Bay Watershed

Nutrient TMDL	1990-1997 Loading	2002 Summer Allocation (Apr-Sept)[6]	2007 Summer Allocation (Apr-Sept)[6]	2012 Winter Allocation (Oct-Mar)[5, 6, 9]
Newport Bay Watershed	lbs/year TN[2]	lbs/season TN	lbs/season TN	lbs/season TN
Wasteload Allocation				
Urban runoff	277,131[4]	20,785	16,628	55,442
		5 year target	10 year target	15 year target

1 TIN = (NO3+NH3).
2 TN = (TIN + Organic N).
4 Estimated annual average (summer and winter loading).
5 Total nitrogen winter loading limit applies between October 1 and March 31 when the mean daily flow rate at San Diego Creek at Campus Drive is below 50 cubic feet per second (cfs), and when the mean daily flow rate in San Diego Creek at Campus Drive is above 50 cubic feet per second (cfs), but not as the result of precipitation.
6 Compliance to be achieved no later than this date. The Regional Board may require earlier compliance with these targets when it is feasible and reasonable.
9 Assumes 67 non-storm days.

Table 2. Annual Total Phosphorous Load Allocations For The Newport Bay Watershed

	2002 Allocation lbs/year TP[1]	2007 Allocation lbs/year TP[1]
TMDL	86,912	62,080
Urban areas	4,102	2,960

1 Compliance to be achieved no later than this date. The Regional Board may require earlier compliance with these targets when it is feasible and reasonable.

Table 3. Annual Total Nitrogen Load Allocations For San Diego Creek, Reach 2 During Non-Storm Conditions.[1]

	2012 Allocation lbs/day TN[2]
TMDL	14 lbs/day (TN)
Waste Load Allocation (Urban runoff)	5.5 lbs/day (TN)

[1] Total nitrogen loading limit applies when the mean daily flow rate at San Diego Creek at Culver Drive is below 25 cubic feet per second (cfs), and when the mean daily flow rate in San Diego Creek at Culver Drive is above 25 cubic feet per second (cfs), but not as the result of precipitation.

[2] Compliance to be achieved no later than this date. The Regional Board may require earlier compliance with these targets when it is feasible and reasonable.

2. The permittees shall meet the following target load allocations for sediment in urban runoff by implementing the BMPs contained in Appendix N of the DAMP and the "March 1999 Technical Report on the Implementation of the TMDL for Sediment in the Newport Bay Watershed, the October 1999 Preliminary Sediment Load Allocation Analysis for San Diego Creek and Newport Bay, and the February 2000 Sediment Yield and Transport Investigation for San Diego Creek and Newport Bay".
    a. The load allocations for sediment discharges to Newport Bay from urban areas shall not exceed 2,500 tons per year, implemented as a 10-year running annual average.
    b. The load allocations for sediment discharges to San Diego Creek and its tributaries from urban areas shall not exceed 2,500 tons per year, implemented as a 10-year running annual average.
3. The permittees shall revise Appendix N of the DAMP to include implementation measures and schedules for further studies related to the TMDL for fecal coliform in Newport Bay, as set fourth in the January 2000, March 2000 and April 2000 Newport Bay Fecal Coliform TMDL Technical Reports submitted by the permittees.
4. This order may be reopened to include additional requirements based on new or revised TMDLs.

XVII. PROGRAM MANAGEMENT/DAMP REVIEW

1. By July 1 of each year, the permittees shall evaluate the DAMP to determine whether any revisions are necessary in order to reduce pollutants in MS4 discharges to the maximum extent practicable. At a minimum, the first annual review after adoption of this order shall include the following:
    a. Review of the formal training needs of municipal employees
    b. Review of coordinating meeting/training for the designated NPDES inspectors.
2. The annual report shall include the findings of this review and a schedule for any needed revisions or a copy of the amended DAMP with the proposed changes.

3. The permittees shall modify the DAMP, at the direction of the Regional Board Executive Officer, to, as necessary, incorporate additional provisions. Such provisions may include regional and watershed-specific requirements and/or waste load allocations developed and approved pursuant to the TMDL process.
4. The Permittee Committee shall meet at least six times a year to discuss issues related to permit implementation and regional and statewide issues. Each permittee's designated representative or a designated alternate should attend at least 75% of these meetings.

XVIII. FISCAL RESOURCES

1. The permittees shall prepare and submit a unified fiscal analysis to the Executive Officer of the Regional Board. The fiscal analysis shall be submitted with the Annual Report document no later than November 15th of each year and shall, at a minimum, include the following:
    a. Each permittee's expenditures for the previous fiscal year,
    b. Each permittee's budget for the current fiscal year,
    c. A description of the source of funds, and
    d. Each permittee's estimated budget for the next fiscal year.

XIX. PROVISIONS

1. The purpose of this Order is to require the implementation of best management practices to reduce, to the maximum extent practicable, the discharge of pollutants from the MS4 in order to support reasonable further progress towards attainment of water quality objectives.

    Permittees shall demonstrate compliance with all the requirements in this order and specifically with Section III. Discharge Limitations and Section IV. Receiving Water Limitations, through timely implementation of their DAMP and any approved modifications, revisions, or amendments developed pursuant to this order. The DAMP, as included in the Report of Waste Discharge, including any approved amendments thereto, is hereby made an enforceable component of this order.
2. The permittees shall implement all elements of the DAMP. Where the dates in the DAMP are different than those of this order, the dates in this order shall prevail. Any proposed revisions to the DAMP shall be submitted with the Annual Report to the Executive Officer of the Regional Board for review and approval. All approved revisions to the DAMP shall be implemented as per the time schedules approved by the Executive Officer.
3. The permittees shall comply with Monitoring and Reporting Program No. 01-20, and any revisions thereto, which is hereby made a part of this order. ~~including t~~The Executive Officer is authorized to revise the Monitoring and Reporting Program and also to allow the permittees to participate in regional, statewide, national or other monitoring programs in lieu of or in addition to Monitoring and Reporting Program No. 01-20.

4. By November 15, 2002, the permittees, in coordination with the Orange County Fire Chiefs Association, shall develop a list of appropriate BMPs to be implemented to reduce pollutants from training activities, fire hydrant/sprinkler testing or flushing, non-emergency fire fighting, and any BMPs feasible for emergency fire fighting flows.
5. The permittees should consult the Orange County Vector Control District to ensure that structural treament systems are designed to minimize the potential for vector breeding.
6. Upon approval by the Executive Officer of the Regional Board, all plans, reports and subsequent amendments required by this order shall be implemented and shall become an enforceable part of this order. Prior to approval by the Executive Officer, these plans, reports and amendments shall not be considered as an enforceable part of this order.
7. The permittees shall report to the Executive Officer of the Regional Board:
   a. Any enforcement actions and discharges of storm or non-storm water, known to the permittees, which may have an impact on human health or the environment,
   b. Any suspected or reported activities on federal, state, or other entity's land or facilities, where the permittees do not have any jurisdiction, and where the suspected or reported activities may be contributing pollutants to waters of the US.

   (Also see reporting requirements in Monitoring and Reporting Program No. 01-20)

~~6~~8. Permit application and special NPDES program requirements contained in 40 CFR 122.21 (a), (b), (d)(2), (f), (p); 122.41 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l); and 122.42 (c) are incorporated into this order by reference.

XX. PERMIT EXPIRATION AND RENEWAL

1. This order expires on December 19, 2006 and the permittees must file a Report of Waste Discharge (permit application) no later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements. The Report of Waste Discharge shall, at a minimum, include the following:
   a. Any revisions to the Drainage Area Management Plan including, but not limited to, all the activities the permittees propose to undertake during the next permit term, goals and objectives of such activities, an evaluation of the need for additional source control and/or structural BMPs, any proposed pilot studies, etc.;
   b. Changes in land use and/or population including land use map updates; and
   c. Any significant changes to the storm drain systems, outfalls, detention or retention basins or dams, and other controls including map updates of the storm drain systems.
   d. Any new or revised program elements and compliance schedule(s) necessary to comply with Section IV of this order.
2. This Order may be modified, revoked or reissued prior to its expiration date for the following reasons:

a. To address significant changes in conditions identified in the technical reports required by the Regional Board which were unknown at the time of the issuance of this order;

b. To incorporate applicable requirements of statewide water quality control plans adopted by the State Water Resources Control Board or any amendments to the Basin Plan approved by the Regional Board, the State Board, and, if necessary, by the Office of Administrative Law; or

c. To comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this order.

d. To incorporate any requirements imposed upon the permittees through the TMDL process.

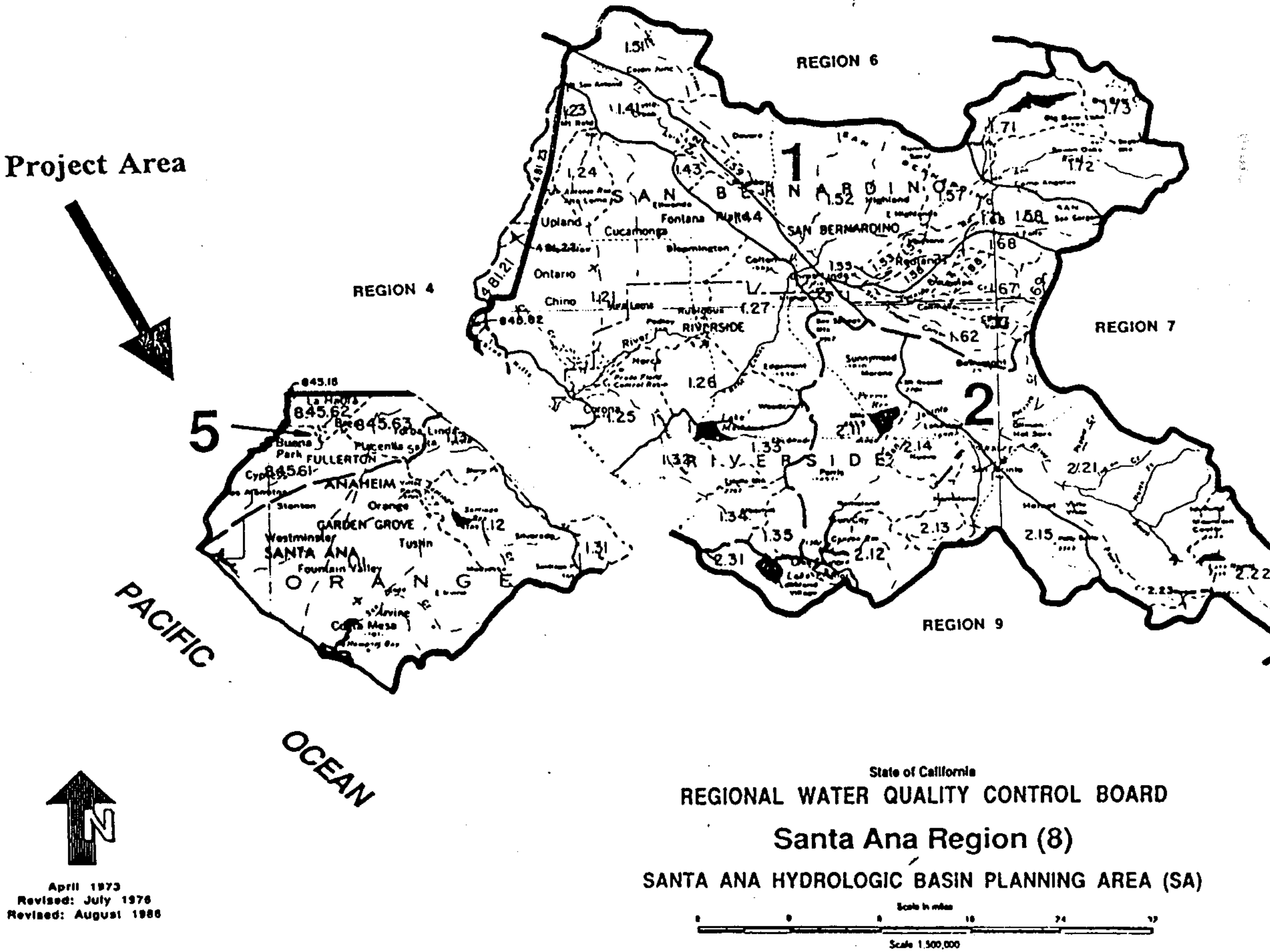
3. This order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit pursuant to Section 402 (p) of the Clean Water Act, or amendments thereto, and shall become effective ten days after the date of its adoption, provided the Regional Administrator of the U. S. EPA has no objections. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

4. Order No. 96-31 is hereby rescinded.

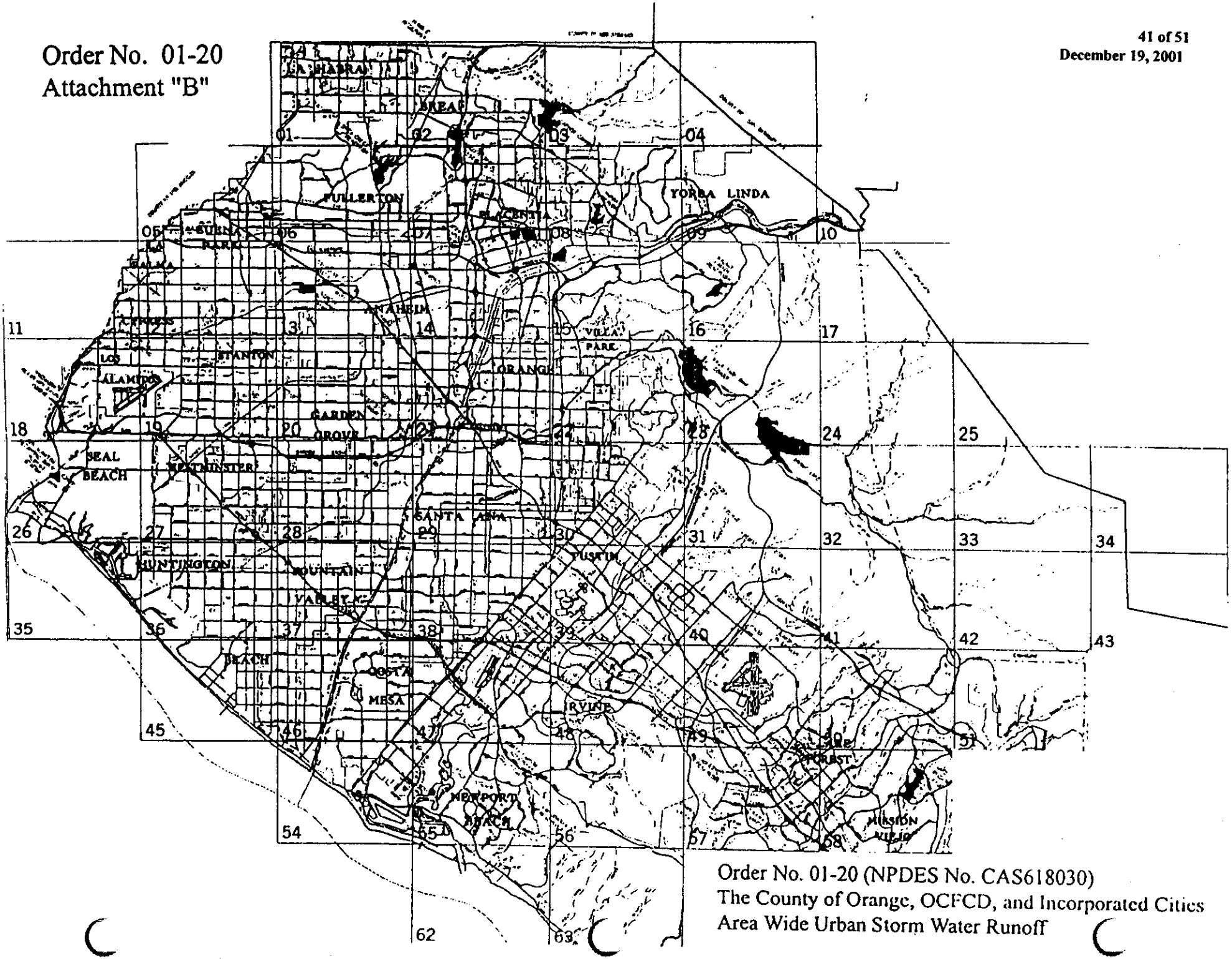
I, Gerard Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on December 19, 2001.

_____

Gerard J. Thibeault
Executive Officer


Project Area
5
REGION 6
REGION 4
REGION 7
REGION 9
1
2
SAN BERNARDINO
RIVERSIDE
ORANGE
PACIFIC
OCEAN
FULLERTON
ANAHEIM
GARDEN GROVE
SANTA ANA
Westminster
Tustin
Orange
Upland
Ontario
Chino
Fontana
Cucamonga
Corona
N
April 1973
Revised: July 1976
Revised: August 1986
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Santa Ana Region (8)
SANTA ANA HYDROLOGIC BASIN PLANNING AREA (SA)
Scale 1:500,000

Order No. 01-20
Attachment "B"



Order No. 01-20
Attachment "C"
LIST OF OTHER ENTITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS TO THE ORANGE COUNTY STORM WATER SYSTEM

California Department of Transportation (Caltrans), District 12
Southern Pacific Railroad
Atchison, Topeka & Santa Fe Railway Company
Seal Beach Naval Weapons Station
Seal Beach Naval Reserve Center, Los Alamitos
U. S. Marine Corps Air Station, El Toro
National Forest Service

Universities and Colleges

University of California, Irvine
California State University, Fullerton
Chapman College
Coastline College
Cypress College
Fullerton College
Irvine Valley College
Golden West College
Orange Coast College
Rancho Santiago College

School Districts

Anaheim Elementary School District
Anaheim Union High School District
Brea-Olinda Unified School District
Buena Park Joint Union High School District
Centralia Elementary School District
Cypress Elementary School District
Fountain Valley Union High School District
Fullerton Joint Union High School District
Garden Grove Unified School District
Huntington Beach Elementary School District
Huntington Beach Union High School District
Irvine Unified Union High School District
La Habra Joint Union High School District
Los Alamitos Unified School District
Lowell Joint Union High School District
Magnolia Elementary School District
Newport-Mesa Unified School District

Ocean View Union High School District
Orange Unified School District
Placentia Unified School District
Santa Ana Unified School District
Savanna Union High School District
Tustin Unified School District
Westminster Union High School District
Yorba Linda Joint Union High School District

Hospitals

Anaheim General Hospital
Brea Community Hospital
Chapman General Hospital
Children's Hospital of Orange County, Orange
Coastal Communities Hospital, Santa Ana
Fairview Hospital
FHP Hospital, Fountain Valley
Fountain Valley Regional Hospital and Medical Center
Hoag Hospital, Newport Beach
Kaiser Foundation Hospital, Anaheim
Orange County Community Hospital, Buena Park
Pacifica Community Hospital, Huntington Beach
Placentia Linda Community Hospital
Santa Ana Hospital and Medical Center
St. Joseph's Hospital, Orange
U.C. Irvine Medical Center
Vencor Hospital of Orange County, Westminster
Whittier Hospital and Medical Center, Buena Park

Water/Wastewater Agencies

Santa Ana Watershed Project Authority
Irvine Ranch Water District
Los Aliso Water District
El Toro Water District
San Bernardino County Flood Control District
Riverside County Flood Control & Water Conservation District
L.A. County Department of Public Works
County Sanitation Districts of Orange County
Orange County Water District
Metropolitan Water District

California Regional Water Quality Control Board
Santa Ana Region

Monitoring and Reporting Program No. 01-20
NPDES No. CAS618030

for
the County of Orange, Orange County Flood Control District,
and
Incorporated Cities of Orange County Within the Santa Ana Region
Areawide Urban Storm Water Runoff

I. GENERAL

1. Revisions of the monitoring and reporting program are appropriate to ensure that the permittees are in compliance with requirements and provisions contained in this order. Revisions may be made under the direction of the Executive Officer at any time during the term, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

2. The Executive Officer is authorized to allow the permittees to participate in statewide, national, or other monitoring programs in lieu of this monitoring program.

3. All sample collection, handling, storage, and analysis shall be in accordance with 40 CFR Part 136 or other methods approved by the Executive Officer.

4. The permittees are authorized to complement their monitoring data with other monitoring sources, provided the monitoring conditions and sources are similar to those in the Santa Ana Watershed.

II. OBJECTIVES

The 1999 Water Quality Monitoring Program prioritized selected monitoring locations in Orange County based on a list of Critical Aquatic Resources and "Warm Spots". This prioritization is based on an analysis of prior years' monitoring data and other available data. It is expected that data collection for the 1999 monitoring program will be completed by July 1, 2003. The permittees also participate in the Regional Monitoring Program for San Diego Creek Nutrient TMDL and other regional monitoring programs, such as those conducted by the Southern California Coastal Water Research Project. The overall goal of these monitoring programs is to develop and support an effective watershed management program. The following are the major objectives:

1. To develop and support an effective municipal urban runoff and non-point source control program.

2. To define water quality status, trends, and pollutants of concern associated with urban storm water and non-storm water discharges and their impact on the beneficial uses of the receiving waters.

3. To characterize pollutants associated with urban storm water and non-storm water discharges and to assess the influence of urban land uses on water quality and the beneficial uses of receiving waters.

4. To identify significant water quality problems related to urban storm water and non-storm water discharges.

5. To identify other sources of pollutants in storm water and non-storm water runoff to the maximum extent possible (e.g., atmospheric deposition, contaminated sediments, other non-point sources, etc.)

6. To identify and prohibit illicit discharges.

7. To identify those waters, which without additional action to control pollution from urban storm water discharges, cannot reasonably be expected to attain or maintain applicable water quality standards required to sustain the beneficial uses in the Basin Plan (TMDL monitoring).

8. To evaluate the effectiveness of existing municipal storm water quality management programs, including an estimate of pollutant reductions achieved by the structural and nonstructural BMPs implemented by the permittees.

9. To evaluate costs and benefits of proposed municipal storm water quality control programs to the stakeholders, including the public.

The Regional Board recognizes that these objectives may not be attainable during this permit period and authorizes the Executive Officer to evaluate and to determine adequate progress toward meeting each objective.

III. MONITORING PROGRAM REQUIREMENTS

1. The permittees shall complete the 1999 Water Quality Monitoring Program.

2. The permittees shall revise, by July 1, 2003, their Water Quality Monitoring Program to include, at a minimum, the following monitoring components or their equivalence:

   A. Mass Emissions Monitoring.

      (1) The principal permittee shall monitor mass emissions in order to: (a) estimate the total mass emissions from the MS4; (b) assess trends in mass emissions over time; and (c) to determine if the MS4 is contributing to exceedances of water quality objectives or beneficial uses, by comparing results to the California Toxics Rule (CTR), Basin Plan, Ocean Plan and/or other relevant standards.

(2) A minimum of seven mass emissions stations shall be placed at locations to include coastal outfalls at Huntington Harbor/Anaheim Bay, the coastline between Huntington Harbor and Newport Bay, Upper/Lower Newport Bay, the Crystal Cove Area of Special Biological Significance (ASBS), and north Orange County where surface flows have not been well-characterized (e.g., Fullerton Creek Channel, Carbon Creek Channel, or Coyote Creek). Additional locations should be based on large discharge volumes, large subwatershed drainage areas, and/or land use distribution.

(3) Autosamplers shall be programmed to collect representative samples from the first storm event and two more storm events during the rainy season. A minimum of three dry-weather samples shall also be collected. Samples from the first rain event each year shall be analyzed for the entire suite of priority pollutants. All samples must be analyzed for metals, pH, TSS, TOC, pesticides/herbicides, and constituents which are known to have contributed to impairment of local receiving waters. Dry weather samples should also include an analysis for oil and grease. Sediments associated with mass emissions should be analyzed for constituents of concern.

B. Estuary/Wetlands Monitoring

(1) The permittees shall monitor the Upper Newport estuary, Talbert Marsh, and Bolsa Chica wetlands areas to determine the effects of storm water and non-storm water runoff associated with increased urbanization on these systems.

(2) Monitoring locations shall include representative areas surrounding channel outfalls and areas away from channel outfalls. Sampling strategies shall be designed to enable the determination of storm water and non-storm water effects on sediment chemistry, toxicity, benthic communities, nutrient status, and spatial extent of sediment fate within the estuarine environment. Additionally, other indicators of biological integrity should be evaluated, such as bird populations or endangered plant/animal species.

C. Water Column Toxicity Monitoring

(1) Analyses for toxicity to freshwater and marine species shall be performed on mass emissions samples to determine the impacts of storm water and non-storm water runoff on toxicity of receiving waters.

(2) *Ceriodaphnia dubia* and *Strongylocentrotus purpuratus* fertilization shall be used to evaluate toxicity on the sample from the first rain event, plus one other wet weather sample and two dry weather samples.

(3) Criteria shall be identified which will trigger the initiation of Toxicity Identification Evaluations (TIEs) and Toxicity Reduction Evaluations (TREs).

D. Bacteriological/Pathogen Monitoring

(1) The permittees shall obtain monitoring data from other entities (such as the Orange County Health Care Agency) and/or monitor representative areas along the Orange County coastline, as well as a minimum of six inland water bodies/channels, for total coliform, fecal coliform, and Enterococcus in order to determine the impacts of storm water and non-storm water runoff on loss of beneficial uses to receiving waters. Inland monitoring stations shall be located to include channels/creeks which are currently impaired for pathogens.

(2) Where possible, data shall be obtained from monitoring efforts of Orange County Health Care Agency, POTWs, and/or other public or private agencies/entities. Monitoring shall be conducted directly by the permittees only to the extent that data gaps exist.

E. Bioassessment

(1) The permittees shall cooperate with the Southern California Coastal Water Research Project (SCCWRP) in efforts to evaluate the biological index approach for Southern California and to design a research project for developing an Index of Biological Integrity (IBI) for the region.

(2) The permittees shall coordinate with SCCWRP and the Regional Board to identify appropriate bioassessment station locations. Station selection and sampling scheme shall be identified in the revised Monitoring Program, and sampling should commence no later than October 2002.

F. Reconnaissance

(1) The permittees shall develop new reconnaissance strategies to identify and prohibit illicit discharges. Where possible, the use of GIS to identify geographic areas with a high density of industries associated with gross pollution (e.g. electroplating industries, auto dismantlers) and/or locations subject to maximum sediment loss (e.g. new development) may be used to determine areas for intensive monitoring efforts. Additionally, the permittees shall coordinate with the Regional Board to develop a comprehensive database to include all enforcement actions for storm water violations and unauthorized, non-storm water discharges, that can then be used to more effectively target reconnaissance efforts.

G. Land Use Correlations

(1) The permittees shall develop and implement strategies for determining the effects of land use on the quality of receiving waters. While it is recognized that a wide range of land uses exists across the region and within each subwatershed, one relationship that may be easily determined is the impact of development on sediment loading within receiving waters, since developed areas contribute relatively little sediment loading compared to areas under construction. Consequently, the permittees shall, at a minimum, analyze the impacts of increasing development and the conversion of agricultural land to the sediment loading of the Upper Newport Bay.

(2) Where possible, data shall be obtained from monitoring efforts of other public or private agencies/entities (e.g., Caltrans, The Irvine Company).

H. TMDL/303(d) Listed Waterbody Monitoring

The Permittees shall continue to participate in the Regional Monitoring Program for the San Diego Creek Nutrient TMDL. In addition, strategies must be revised/developed to evaluate the impacts of storm water or non-storm water runoff on all impairments within the Newport Bay watershed and other 303(d) listed waterbodies. Since the 303(d) listing is dynamic, with new waterbodies and new impairments being identified over time, the permittees shall revise their monitoring plan to incorporate new information as it becomes available.

3. By July 1, 2003, the permittees shall develop and submit for approval of the Executive Officer, their revised Water Quality Monitoring Program, which should yield an integrated watershed-monitoring approach capable, to the maximum extent possible, of achieving the above-stated goals. In order to minimize cost and maximize benefits, it is highly recommended that this program be developed in cooperation with the SCCRWP, the Orange County Health Care Agency, neighboring coastal regions and/or other public or private agencies/entities. The development and implementation of the monitoring program shall be in accordance with the time schedules prescribed by the Executive Officer. At a minimum, the program shall include the following and any requirements developed by the State Board in accordance with Water Code Section 13383.5:

A. Uniform guidelines for quality control, quality assurance, data collection and data analysis that conform to current US EPA standards.

B. A mechanism for the collection, analysis and interpretation of existing data from local, regional or national monitoring programs. These data sources may be utilized to characterize different storm water sources; to determine pollutant generation, transport and fate; to develop a relationship between land use, development size, storm size and the event mean concentration of pollutants; to determine spatial and temporal variances in storm water quality and seasonal and other bias in the collected data; and to identify any unique features of the Santa Ana Watershed. The permittees are encouraged to use data from similar studies, if available.

C. A description of the monitoring program, including:

(1) The number of monitoring stations;

(2) Monitoring locations within flood control channels, bays and estuaries, coastal areas, major outfalls, and other receiving waters;

(3) Environmental indicators (e.g., ecosystem, biological, habitat, chemical, sediment, stream health, etc.) chosen for monitoring;

(4) Parameters selected for field screening and for laboratory work;

(5) Total number of samples to be collected from each station, frequency of sampling during wet and dry weather, short duration or long duration storm events, type of samples (grab, 24-hour composite, etc.), justification for composite versus discrete sampling, type of sampling equipment, quality assurance/quality control procedures followed during sampling and analysis, analysis protocols to be followed (including sample preparation and maximum reporting limits), and identity and qualifications of laboratories performing analyses;

(6) A mechanism for analyzing the collected data and interpreting the results including protocols for handling of non-detects and 'outliers', an evaluation of the effectiveness of the management practices, and need for refinement of the management practices; and,

(7) A description of the responsibilities of all the participants in this program including cost sharing.

IV. REPORTING

1. All progress reports and proposed strategies and plans required by this order shall be signed by the principal permittee, and copies shall be submitted to the Executive Officer of the Regional Board under penalty of perjury.

2. The permittees shall submit an **ANNUAL PROGRESS REPORT** to the Executive Officer of the Regional Board and to the Regional Administrator of the U.S. EPA, Region 9, no later than November 15th, of each year. This progress report may be submitted in a mutually agreeable electronic format. At a minimum, annual progress report shall include the following:

A. A review of the status of program implementation and compliance (or non-compliance) with the schedules contained in this order;

B. An assessment of the effectiveness of control measures established under the illicit discharge elimination program and the Drainage Area Management Plan. The effectiveness may be measured in terms of how successful the program has been in eliminating illicit/illegal discharges and reducing pollutant loads in storm water discharges;

C. An assessment of any storm water management program modifications made to comply with Clean Water Act requirements to reduce the discharge of pollutants to the maximum extent practicable;

D. A summary and analysis of monitoring results from the previous year and any changes to the monitoring program for the following year;

E. A fiscal analysis progress report as described in Section V., Provision, 25., of this order;

F. A draft workplan which describes the proposed implementation of the DAMP for next fiscal year. The workplan shall include clearly defined tasks, responsibilities, and schedules for implementation of the storm water program and each permittee actions for the next fiscal year; and

G. Major changes in any previously submitted plans/policies.

3. The permittees shall be responsible for the submittal to the principal permittee of all required information/materials needed to comply with this order in a timely manner. All such submittals shall be signed by a duly authorized representative of the permittee under penalty of perjury.

(This section intentionally left blank.)

V. REPORTING SCHEDULE

All reports required by this order shall be submitted to the Executive Officer of the Regional Board in accordance with the following schedule:

ITEM	COMPLETION DATE	REPORT DUE DATE
Review planning procedures and CEQA document preparation processes	December 19, 2002	January 2, 2004
Establish Public Education Committee	March 1, 2002	Nov 15, 2002
Review DAMP	July 1, 2003	Nov 15, 2003
Develop public education materials including reporting hot-line and web site	July 1, 2002	Nov 15, 2002
Develop and update construction site, including site information, priority, and inspection information	October 1, 2002	Nov 15, 2003
Establish mechanism to ensure local permits for proposed construction sites and industrial facilities are conditioned upon proof of obtaining coverage under the state General Permit	July 1, 2002	Nov 15, 2002
Develop and distribute model maintenance procedures for public agency activities	July 1, 2002	Nov 15, 2002
Develop and distribute BMP guidance for public agency and contract field operations and maintenance staff	July 1, 2002	Nov 15, 2002
Develop model maintenance procedures for drainage facilities	July 1, 2002	Nov 15, 2002
Evaluate Environmental Performance Program applicability to municipal maintenance contracts, contract for field maintenance operations, and leases	July 1, 2002	Nov 15, 2002
Review and revise current grading/erosion control ordinances	July 1, 2003	Nov 15, 2003
Implementation Agreement Revision	July 1, 2002	Nov 15, 2002
Litter/Trash Control Ordinance review	July 1, 2003	Nov 15, 2003

Additional Debris Control Measures Determination	July 1, 2003	Nov 15, 2003
Complete Public Awareness Survey	July 1, 2002	Nov 15, 2002
Proposed Monitoring Program	July 1, 2003	July 1, 2003
Develop restaurant inspections program, which includes runoff, grease blockage and spill reduction aspects	July 1, 2002	Nov 15, 2002
Legal Authority & Enforcement Strategy Certification	November 1, 2003	Nov 15, 2003
Review effectiveness of ordinances in prohibiting discharges to MS4's as listed in Section 7.	July 1, 2003	Nov 15, 2003
Develop and update an industrial site database, including facility information, priority, and inspection information	July 1, 2003	Nov 15, 2003
Develop and update a commercial site database, including facility information, priority, and inspection information	July 1, 2003	Nov 15, 2003
Propose mechanism to determine effect of septic system failures on storm water quality and a mechanism to address failures	July 1, 2003	Nov 15, 2003
Review oversight of portable toilets to determine need for any revision	July 1, 2003	Nov 15, 2003
BMP Guidance for Restaurants, Automotive Service Centers, and Gasoline Service Stations, developed by Public Education Committee	July 1, 2002	Nov 15, 2002
BMP Guidance for Control of Potential Polluting Activities not otherwise regulated	July 1, 2003	Nov 15, 2003
Review existing BMPs for New Developments and Water Quality Management Plan to determine need for development of Water Quality Protection Plan	July 1, 2003	Nov 15, 2003
Propose study of erosion control BMPs for new development	November 15, 2003	Nov 15, 2003
Incorporate watershed protection principles	July 1, 2004	Nov 15, 2004

and policies into the General Plan		
Report of Waste Discharge	180 days before permit expires	Dec. 1, 2005
Annual Report/Fiscal Analysis	November 15th of each year	Nov 15
Evaluate Storm Water Management structure and Implementation Agreement	July 1st of each year	Nov 15
Review Environmental Performance Reports	July 1st of each year	Nov 15
Provide training to public agency staff and to contract field operations staff	Annually	Nov 15
Re-evaluate monitoring program priorities based on previous year's data	Annually	Nov 15
Evaluate the DAMP	July 1st of each year	Nov 15
Permittee Committee meetings to discuss permit implementation and regional and state-wide issues	Held at least 6 times each year	Nov 15

Ordered by_____

Gerard J. Thibeault
Executive Officer
December 19, 2001

Errata Sheet for Tentative Order No. 01-20
NPDES No. CAS618030

Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and The Incorporated Cities of Orange County Within the Santa Ana Region Areawide Urban Storm Water Runoff

Text

Item No.	Location	Changes (strikeout/final)
1	Fact Sheet IX.7 (Page 18)	7. MUNICIPAL INSPECTION PROGRAM Inspections by the municipalities, of construction, industrial, and commercial activities within their jurisdiction <u>will be conducted, in order to control the loading of pollutants entering the MS4 system. The municipalities will inventory companies and sites in the above categories; prioritize those companies and sites with respect to their potential for discharge of pollutants in runoff and their proximity to sensitive receiving waters; and perform regular inspections to insure compliance with local ordinances. While initial observations of non-compliance may result in 'educational' type enforcement, repeated non-compliance will result in more disciplinary forms of enforcement, such as, monetary penalties, stop work orders or permit revocation.</u>
		7. MUNICIPAL INSPECTION PROGRAM Inspections by the municipalities, of construction, industrial, and commercial activities within their jurisdiction will be conducted, in order to control the loading of pollutants entering the MS4 system. The municipalities will inventory companies and sites in the above categories; prioritize those companies and sites with respect to their potential for discharge of pollutants in runoff and their proximity to sensitive receiving waters; and perform regular inspections to insure compliance with local ordinances. While initial observations of non-compliance may result in 'educational' type enforcement, repeated non-compliance will result in more disciplinary forms of enforcement, such as, monetary penalties, stop work orders or permit revocation.
2	Fact Sheet IX.9 (Page 18)	9. ~~SANITARY SEWER LINE LEAKS, SEWAGE SPILLS AND~~ SEPTIC SYSTEM FAILURES <u>AND PORTABLE TOILET DISCHARGES</u> A number of beach closures in Orange County have been due to spills, overflows~~,~~ and leaks from sanitary sewer lines. <u>To address these concerns, a set of separate waste discharge requirements for local sanitary</u>

		sewer agencies is being prepared by the Regional Board. Failing septic systems and improper use of portable toilets have also been linked to microbial contamination of urban runoff. The permittees shall identify, with the appropriate local agency, a mechanism ~~should work cooperatively with the owners of the sanitary sewer lines to determine if exfiltration from leaking sanitary sewer lines, sewage spills from blocked sewer lines and failing septic systems~~ to determine if failure of these septic systems are causing or contributing to urban storm water pollution problems in their jurisdictions. The permittees shall also review their local oversight program for the placement and maintenance of portable toilets to determine the need for any revision.
		9. SEPTIC SYSTEM FAILURES AND PORTABLE TOILET DISCHARGES A number of beach closures in Orange County have been due to spills, overflows and leaks from sanitary sewer lines. To address these concerns, a set of separate waste discharge requirements for local sanitary sewer agencies is being prepared by the Regional Board. Failing septic systems and improper use of portable toilets have also been linked to microbial contamination of urban runoff. The permittees shall identify, with the appropriate local agency, a mechanism to determine if failure of these septic systems are causing or contributing to urban storm water pollution problems in their jurisdictions. The permittees shall also review their local oversight program for the placement and maintenance of portable toilets to determine the need for any revision.
3	Finding 26 (Page 8)	26. The major focus of storm water pollution prevention is the development and implementation of an appropriate DAMP including best management practices (BMPs). The ultimate goal of the urban storm water management program is to support attainment of water quality objectives for the receiving waters and to protect beneficial uses through the implementation of the DAMP. The permittees developed and submitted a DAMP~~, which was approved on May 3, 1994~~.
		26. The major focus of storm water pollution prevention is the development and implementation of an appropriate DAMP including best management practices (BMPs). The ultimate goal of the urban storm water management program is to support attainment of water quality objectives for the receiving waters and to protect beneficial uses through the implementation of the DAMP. The permittees developed and submitted a DAMP.
4	Finding31 (Page 9)	31. In accordance with the Strategic Plan and Initiatives for the State and Regional Boards (June 22, 1995), the Regional Board recognizes the importance of an integrated watershed management approach. The Regional Board also recognizes that a watershed management program should integrate all related programs, including the storm water program and TMDL processes. Consistent with this approach, some of the municipal storm water monitoring programs have already been integrated into regional monitoring programs.

		31. In accordance with the Strategic Plan and Initiatives for the State and Regional Boards (June 22, 1995), the Regional Board recognizes the importance of an integrated watershed management approach. The Regional Board also recognizes that a watershed management program should integrate all related programs, including the storm water program and TMDL processes. Consistent with this approach, some of the municipal storm water monitoring programs have already been integrated into regional monitoring programs.
5	Findings 37 (Page 11)	37. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the U.S. EPA were aware of the difficulties in regulating urban storm water runoff solely through traditional end-of-pipe treatment. However, it is the Regional Board's intent that this order require the implementation of best management practices to reduce to the maximum extent practicable, the discharge of pollutants in storm water from the MS4s in order to support attainment of water quality standards. This order, therefore, includes Receiving Water Limitations based upon water quality objectives, <u>prohibits</u> the ~~prevention~~ <u>creation</u> of nuisance and <u>requires</u> the reduction of water quality impairment in receiving waters. In accordance with Section 402 (p) of the Clean Water Act, this order requires the permittees to implement control measures, in accordance with the ~~approved~~ DAMP, that will reduce pollutants in storm water discharges to the maximum extent practicable. The Receiving Water Limitations similarly require the implementation of control measures, to the extent that they are technically and economically feasible to protect beneficial uses and attain water quality objectives of the receiving waters.
		37. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the U.S. EPA were aware of the difficulties in regulating urban storm water runoff solely through traditional end-of-pipe treatment. However, it is the Regional Board's intent that this order require the implementation of best management practices to reduce to the maximum extent practicable, the discharge of pollutants in storm water from the MS4s in order to support attainment of water quality standards. This order, therefore, includes Receiving Water Limitations based upon water quality objectives, prohibits the creation of nuisance and requires the reduction of water quality impairment in receiving waters. In accordance with Section 402 (p) of the Clean Water Act, this order requires the permittees to implement control measures, in accordance with the DAMP, that will reduce pollutants in storm water discharges to the maximum extent practicable. The Receiving Water Limitations similarly require the implementation of control measures, to the extent that they are technically and economically feasible to protect beneficial uses and attain water quality objectives of the receiving waters.

6	Section IV.1 (Page 17)	1. Discharges from the MS4s shall not cause or contribute to exceedances of receiving water quality standards (designated beneficial uses and water quality objectives) for surface waters or groundwaters.
		1. Discharges from the MS4s shall not cause or contribute to exceedances of receiving water quality standards (designated beneficial uses and water quality objectives) for surface waters or groundwaters.
7	Section IV.3 (Page 17)	3. The DAMP and its components shall be designed to achieve compliance with receiving water limitations (it is expected that this will be achieved through an iterative process and the application of increasingly more effective BMPs). The permittees shall comply with Sections III.2 and IV of this order through timely implementation of control measures and other actions to reduce pollutants in urban storm water runoff ~~to the maximum extent practicable~~ in accordance with the DAMP and other requirements of this order, including any modifications thereto.
		3. The DAMP and its components shall be designed to achieve compliance with receiving water limitations (it is expected that this will be achieved through an iterative process and the application of increasingly more effective BMPs). The permittees shall comply with Sections III.2 and IV of this order through timely implementation of control measures and other actions to reduce pollutants in urban storm water runoff in accordance with the DAMP and other requirements of this order, including any modifications thereto.
8	Section IV.4.a (Page 17)	a. Upon a determination by either the permittees or the Executive Officer that the discharges from the MS4 systems are causing or contributing to an exceedance of an applicable water quality standard, the ~~responsible~~ permittees shall promptly notify and thereafter submit a report to the Executive Officer that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report may be incorporated in the annual update to the DAMP, unless the Executive Officer directs an earlier submittal. The report shall include an implementation schedule. The Executive Officer may require modifications to the report;
		a. Upon a determination by either the permittees or the Executive Officer that the discharges from the MS4 systems are causing or contributing to an exceedance of an applicable water quality standard, the permittees shall promptly notify and thereafter submit a report to the Executive Officer that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report may be incorporated in the annual update to the DAMP, unless the Executive Officer directs an earlier submittal. The report shall include an implementation schedule. The Executive Officer may require modifications to the report;

9	Section IV.4 (Page 18)	4. … So long as the permittees have complied with the procedures set forth above and are implementing the revised DAMP, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless the Executive Officer determines it is necessary to ~~do~~ develop additional BMPs. ~~so in order to satisfy the maximum extent practicable standard.~~
		4. … So long as the permittees have complied with the procedures set forth above and are implementing the revised DAMP, the permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless the Executive Officer determines it is necessary to develop additional BMPs.
10	Section VI.1 (Page 18)	1. The permittees shall maintain ~~and enforce~~ adequate legal authority to control the contribution of pollutants to the MS4 by storm water discharges and enforce those authorities. ~~associated with industrial activities.~~
		1. The permittees shall maintain adequate legal authority to control the contribution of pollutants to the MS4 by storm water discharges and enforce those authorities.
11	Section VI.6 (Page 19)	6. By ~~July 1~~ November 15, 2003, the permittees shall review their water quality and provide a report on ~~the ordinances establishing legal authority to determine~~ the effectiveness of ~~these~~ their water quality ordinances and their enforcement, in prohibiting the following types of discharges to the MS4s ~~and include in the report identified in Item 4, above~~ (the permittees may propose appropriate control measures in lieu of prohibiting these discharges, where the permittees are responsible for ensuring that dischargers adequately maintain those control measures):
		6. By November 15, 2003, the permittees shall review their water quality ordinances and provide a report on the effectiveness of these ordinances in prohibiting the following types of discharges to the MS4s (the permittees may propose appropriate control measures in lieu of prohibiting these discharges, where the permittees are responsible for ensuring that dischargers adequately maintain those control measures):
12	Section VIII.2 (Page 21)	2. To establish priorities for inspection requirements under this Order, the permittees shall prioritize construction sites within their jurisdiction as a high, medium, or low threat to water quality. Evaluation of construction sites should be based on such factors as soil erosion potential, project size, proximity and sensitivity of receiving waters and any other relevant factors. At a minimum, high priority construction sites shall include: sites over 50 acres; sites over 5 acres that are tributary to Clean Water Act section 303(d) waters listed for sediment or turbidity impairments; and sites that are tributary to and within 500 feet of an area defined by

			the Ocean Plan as an Area of Special Biological Significance (ASBS) ~~and are within 500 feet of that ASBS~~.
		2.	To establish priorities for inspection requirements under this Order, the permittees shall prioritize construction sites within their jurisdiction as a high, medium, or low threat to water quality. Evaluation of construction sites should be based on such factors as soil erosion potential, project size, proximity and sensitivity of receiving waters and any other relevant factors. At a minimum, high priority construction sites shall include: sites over 50 acres; sites over 5 acres that are tributary to Clean Water Act section 303(d) waters listed for sediment or turbidity impairments; and sites that are tributary to and within 500 feet of an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS).
13	Section IX.3 (Page 23)	3.	Each permittee shall conduct industrial facility inspections for compliance with its ordinances and permits. Inspections shall include a review of material and waste handling and storage practices, pollutant control BMP implementation and maintenance and evidence of past or present unauthorized, non-storm water discharges. All high priority facilities identified in IX.2 shall be inspected <u>and a report on these inspections shall be submitted by November 15, 2003 and a report of inspections during subsequent years shall be included in the annual report for that year.</u> ~~by July 1, 2003~~.
		3.	Each permittee shall conduct industrial facility inspections for compliance with its ordinances and permits. Inspections shall include a review of material and waste handling and storage practices, pollutant control BMP implementation and maintenance and evidence of past or present unauthorized, non-storm water discharges. All high priority facilities identified in IX.2 shall be inspected and a report on these inspections shall be submitted by November 15, 2003 and a report of inspections during subsequent years shall be included in the annual report for that year.
14	Section XII.A.3 (Page 27)	3.	By December 19, 2002, the permittees <u>shall</u> ~~should~~ review their planning procedures and CEQA document preparation processes to ensure that urban runoff-related issues are properly considered and addressed. If necessary, these processes should be revised by that date to consider and mitigate impacts to storm water quality. These changes may include revising the General Plan, modifying the project approval processes, including a section on urban runoff related water quality issues in an addendum CEQA checklist, and conducting training for project proponents. The <u>findings of this review and the</u> actions taken by the permittees shall be reported to the Regional Board by January 2, 2003. The following potential impacts shall be considered during CEQA review:
		3.	By December 19, 2002, the permittees shall review their planning

		procedures and CEQA document preparation processes to ensure that urban runoff-related issues are properly considered and addressed. If necessary, these processes should be revised by that date to consider and mitigate impacts to storm water quality. These changes may include revising the General Plan, modifying the project approval processes, including a section on urban runoff related water quality issues in an addendum CEQA checklist, and conducting training for project proponents. The findings of this review and the actions taken by the permittees shall be reported to the Regional Board by January 2, 2003. The following potential impacts shall be considered during CEQA review:
15	Section XII.A.4 (Page 27)	4. By July 1, 2004, the permittees shall review their ~~should incorporate~~ watershed protection principles and policies in~~to the~~ their General Plans or related documents (such as Development Standards, Zoning Codes, Conditions of Approval, Development Project Guidance) to ensure that these principles and policies are properly considered and are incorporated into these documents. The findings of this review and the actions taken by the permittees shall be reported to the Regional Board by November 15, 2004.~~and provide proof of such action in the 2004 annual report.~~ These principles and policies should include, but not be limited to, the following considerations:
		4. By July 1, 2004, the permittees shall review their watershed protection principles and policies in their General Plans or related documents (such as Development Standards, Zoning Codes, Conditions of Approval, Development Project Guidance) to ensure that these principles and policies are properly considered and are incorporated into these documents. The findings of this review and the actions taken by the permittees shall be reported to the Regional Board by November 15, 2004. These principles and policies should include, but not be limited to, the following considerations:
16	Section XII.A.6 (Page 28)	6. By July 1, 2003, the permittees shall ~~should~~ review and, as necessary, revise their current grading/erosion control ordinances in order to reduce erosion caused by new development or significant re-development projects.
		6. By July 1, 2003, the permittees shall review and, as necessary, revise their current grading/erosion control ordinances in order to reduce erosion caused by new development or significant re-development projects.
17	Section XII.A.7 (Page 28)	7. The permittees shall ~~should~~ , through conditions of approval, ensure proper maintenance and operation of any permanent flood control structures installed in new developments. The parties responsible for the maintenance and operation of the facilities, and a funding mechanism for operation and maintenance, shall ~~should~~ be identified prior to approval of the project.
		7. The permittees shall, through conditions of approval, ensure proper

		maintenance and operation of any permanent flood control structures installed in new developments. The parties responsible for the maintenance and operation of the facilities, and a funding mechanism for operation and maintenance, shall be identified prior to approval of the project.
18	Section XII.A.8 (Page 28)	8. By November 15, 2003, the principal permittee shall submit a proposal for a study to evaluate the effectiveness of a group of selected BMPs for controlling erosion during new development. Based on the results of this study, one or more BMPs will be identified as (a) County-preferred BMP(s) for erosion control during new development. This proposal shall include details of the new development project site, the BMPs selected for the study, and a proposed schedule ~~to complete the study by the end of this permit term~~. The proposal and final BMP selection shall be approved by the Regional Board Executive Officer and the study shall be completed by the end of this permit term.
		8. By November 15, 2003, the principal permittee shall submit a proposal for a study to evaluate the effectiveness of a group of selected BMPs for controlling erosion during new development. Based on the results of this study, one or more BMPs will be identified as (a) County-preferred BMP(s) for erosion control during new development. This proposal shall include details of the new development project site, the BMPs selected for the study, and a proposed schedule. The proposal and final BMP selection shall be approved by the Regional Board Executive Officer. The study shall be completed by the end of this permit term.
19	Section XII.B.3.C.3 (Page 31)	3. Structural infiltration treatment BMPs shall not cause a nuisance or pollution, as defined in Water Code Section 13050.
		3. Structural infiltration treatment BMPs shall not cause a nuisance or pollution, as defined in Water Code Section 13050.
20	Section XIII.3 (Page 32)	3. By March 1, 2002, the permittees shall establish a Public Education Committee to provide oversight and guidance for the implementation of the public education program. The Public Education Committee shall meet at least twice per year. The Public Education Committee shall make recommendations for any changes to the public and business education program. The goal of the public and business education program shall be to target 100% of the residents, including businesses, commercial and industrial establishments. Through use of local print, radio and television, the permittees must ensure that the public and business education program makes a minimum of 10 million impressions per year and that that those impressions measurably increase the knowledge and measurably change the behavior of the targeted groups. By November 15, 2002, the Public Education Committee shall propose a study for measuring changes in knowledge and behavior as a result of the education program. Upon approval by the Regional Board Executive Officer, the study shall be completed by the end of the permit cycle. By July 1, 2002, the Public Education Committee shall develop BMP

		guidance for restaurants, automotive service centers, and gasoline service stations for the industrial facility inspectors to distribute to these facilities during inspections. Further, for restaurant, automotive service centers, and gasoline service station corporate chains, information is to be developed that will be provided to corporate environmental managers during outreach visits that will take place twice during the permit term.
		3. By March 1, 2002, the permittees shall establish a Public Education Committee to provide oversight and guidance for the implementation of the public education program. The Public Education Committee shall meet at least twice per year. The Public Education Committee shall make recommendations for any changes to the public and business education program. The goal of the public and business education program shall be to target 100% of the residents, including businesses, commercial and industrial establishments. Through use of local print, radio and television, the permittees must ensure that the public and business education program makes a minimum of 10 million impressions per year and that that those impressions measurably increase the knowledge and measurably change the behavior of the targeted groups. By November 15, 2002, the Public Education Committee shall propose a study for measuring changes in knowledge and behavior as a result of the education program. Upon approval by the Regional Board Executive Officer, the study shall be completed by the end of the permit cycle. By July 1, 2002, the Public Education Committee shall develop BMP guidance for restaurants, automotive service centers, and gasoline service stations for the industrial facility inspectors to distribute to these facilities during inspections. Further, for restaurant, automotive service centers, and gasoline service station corporate chains, information is to be developed that will be provided to corporate environmental managers during outreach visits that will take place twice during the permit term.
21	Section XIV.3 (Page 33)	3. By July 1, 2002, the principal permittee shall develop and distribute model maintenance procedures for public agency activities such as street sweeping~~,~~ catch basin stenciling~~,~~ drainage facility <u>inspection, cleaning and</u> maintenance~~,~~ etc. This shall be reported in the 2001-2002 annual report.
		3. By July 1, 2002, the principal permittee shall develop and distribute model maintenance procedures for public agency activities such as street sweeping; catch basin stenciling; drainage facility inspection, cleaning and maintenance; etc. This shall be reported in the 2001-2002 annual report.
22	Section XIV.6 (Page 33)	6. By July 1, 2002, the principal permittee shall develop a model maintenance procedure for drainage facilities. This shall be included in the 2001-2002 annual report. Each permittee shall inspect<u>, clean</u> and maintain at least 80% of its drainage facilities on an annual basis, with 100% of the facilities included in a two-year period, using the model maintenance procedures developed by the principal permittee. This shall be included in the annual report.
		6. By July 1, 2002, the principal permittee shall develop a model

		maintenance procedure for drainage facilities. This shall be included in the 2001-2002 annual report. Each permittee shall inspect, clean and maintain at least 80% of its drainage facilities on an annual basis, with 100% of the facilities included in a two-year period, using the model maintenance procedures developed by the principal permittee. This shall be included in the annual report.
23	Section XVI.1 (Page 34)	1. The permittees shall meet the following target load allocations for nutrients in urban runoff by implementing the BMPs contained in Appendix N (DAMP, Section 12) and in accordance with the approved <u>TMDL</u> implementation plan <u>incorporated in the Basin Plan</u>.
		1. The permittees shall meet the following target load allocations for nutrients in urban runoff by implementing the BMPs contained in Appendix N (DAMP, Section 12) and in accordance with the approved TMDL implementation plan incorporated in the Basin Plan.
24	Section XIX.3 (Page 37)	3. The permittees shall comply with Monitoring and Reporting Program No. 01-20, and any revisions thereto, which is hereby made a part of this order<u>.</u> <u>The</u> ~~including the~~ Executive Officer is authorized to revise the Monitoring and Reporting Program ~~and also~~ to allow the permittees to participate in regional, statewide, national or other monitoring programs in lieu of or in addition to Monitoring and Reporting Program No. 01-20.
		3. The permittees shall comply with Monitoring and Reporting Program No. 01-20, and any revisions thereto, which is hereby made a part of this order. The Executive Officer is authorized to revise the Monitoring and Reporting Program to allow the permittees to participate in regional, statewide, national or other monitoring programs in lieu of or in addition to Monitoring and Reporting Program No. 01-20.
25	Section XIX.8 (Page 38)	8. <u>The permit</u> ~~Permit~~ application and special NPDES program requirements <u>are</u> contained in 40 CFR 122.21 (a), (b), (d)(2), (f), (p); 122.41 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l); and 122.42 (c) are incorporated into this order by reference.
		8. The permit application and special NPDES program requirements are contained in 40 CFR 122.21 (a), (b), (d)(2), (f), (p); 122.41 (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l); and 122.42 (c) are incorporated into this order by reference.
26	M&RP III.E.2 (Page 48)	(2) The permittees shall coordinate with SCCWRP and the Regional Board to identify appropriate bioassessment station locations. Station selection and sampling scheme shall be identified in the revised Monitoring Program, and sampling should commence no later than October 200~~2~~<u>3</u>.
		(2) The permittees shall coordinate with SCCWRP and the Regional Board to identify appropriate bioassessment station locations. Station selection and sampling scheme shall be identified in the revised Monitoring Program, and sampling should commence no later than October 2003.

Footnotes

1	Finding 15 (Page 6)	15. This order regulates urban storm water runoff from areas under the jurisdiction of the permittees. Urban storm water runoff includes those discharges from residential, commercial, industrial, and construction areas within the permitted area and excludes discharges from feedlots, dairies, and farms (also see Finding 16). Storm water discharges consist of surface runoff generated from various land uses in all the hydrologic drainage areas that discharge into the water bodies of the U.S. The quality of these discharges varies considerably and is affected by land use activities, basin hydrology and geology, season, the frequency and duration of storm events, and the presence of illicit[2] disposal practices and illegal connections. [2] Illicit Disposal means any disposal, either intentionally or unintentionally, of material or waste that can pollute storm water or create a nuisance.
2	Finding 21 (Page 7)	21. Order No. 90-71 (first term permit) required the permittees to: (1) develop and implement the DAMP and a storm water and receiving water monitoring plan; (2) eliminate illegal[3] and illicit discharges[4] to the MS4s; and (3) enact the necessary legal authority to effectively prohibit such discharges. The overall goal of these requirements was to reduce pollutant loadings to surface waters from urban runoff to the maximum extent practicable (MEP)[25]. Order No. 96-31 (second term permit) required continued implementation of the DAMP and the monitoring plan, and required the permittees to focus on those areas that threaten beneficial uses. [4] Illicit Discharge means any discharge to the storm drain system that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes all non storm-water discharges except discharges pursuant to an NPDES permit, discharges that are identified in Section III, Discharge Limitations/Prohibitions, of this order, and discharges authorized by the Regional Board Executive Officer.
3	Finding 37 (Page 11)	37. The legislative history and the preamble to the federal storm water regulations indicate that the Congress and the U.S. EPA were aware of the difficulties in regulating urban storm water runoff solely through traditional end-of-pipe treatment. However, it is the Regional Board's intent that this order require the implementation of best management practices to reduce to the maximum extent practicable, the discharge of pollutants in storm water from the MS4s in order to support attainment of water quality standards. This order, therefore, includes Receiving

		Water Limitations[6] based upon water quality objectives, the prevention of nuisance and the reduction of water quality impairment in receiving waters. In accordance with Section 402 (p) of the Clean Water Act, this order requires the permittees to implement control measures, in accordance with the approved DAMP, that will reduce pollutants in storm water discharges to the maximum extent practicable. The Receiving Water Limitations similarly require the implementation of control measures, to the extent that they are technically and economically feasible to protect beneficial uses and attain water quality objectives of the receiving waters. [6] Receiving Water Limitations are requirements included in the Orders issued by the Board to assure that the regulated discharge does not violate water quality standards established in the Basin Plan at the point of discharge to waters of the State.
4	Section VI.6.f (Page 19)	f. Runoff from material storage areas or uncovered receptacles that contain chemicals, fuels, grease, oil, or other hazardous materials[7]; [7] Hazardous Material is defined as any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by EPA to be reported if a designated quantity of the material is spilled into the waters of the United States or emitted into the environment.
5	Section VI.6.g	g. Discharges of runoff from the washing of toxic materials[8] from paved or unpaved areas; [8] Toxic Material is a chemical or a mixture that may present an unreasonable risk of injury to health or the environment.

Table

Table 1. Seasonal Load Allocations of Total Nitrogen for the Newport Bay Watershed

Nutrient TMDL	1990-1997 Loading	2002 Summer Allocation (Apr-Sept)[5]	2007 Summer Allocation (Apr-Sept)[5]	2012 Winter Allocation (Oct-Mar)[4,5,6]
Newport Bay Watershed	lbs/year TN[1,2]	lbs/season TN	Lbs/season TN	lbs/season TN
Wasteload Allocation				
Urban runoff	277,131[3]	20,785	16,628	55,442
		5 year target	10 year target	15 year target

1 TIN = (NO3+NH3).
2 TN = (TIN + Organic N).
3 Estimated annual average (summer and winter loading).
4 Total nitrogen winter loading limit applies between October 1 and March 31 when the mean daily flow rate at San Diego Creek at Campus Drive is below 50 cubic feet per second (cfs), and when the mean daily flow rate in San Diego Creek at Campus Drive is above 50 cubic feet per second (cfs), but not as the result of precipitation.
5 Compliance to be achieved no later than this date. The Regional Board may require earlier compliance with these targets when it is feasible and reasonable.
6 Assumes 67 non-storm days.

Tentative Order No. 01-20
Orange County Municipal Separate Storm Sewer System (MS4) Permit
Comment Letters

Natural Resources Defense Council (NRDC) – May 29, 2001
City of Garden Grove (Garden Grove) – May 30, 2001
City of Lake Forest (Lake Forest) – May 30, 2001
City of Los Alamitos (Los Alamitos) – May 30, 2001
City of Santa Ana (Santa Ana) – May 30, 2001
City of Westminster (Westminster) – May 30, 2001
City of Anaheim (Anaheim) – May 31, 2001
City of Tustin (Tustin) – May 31, 2001
City of Yorba Linda (Yorba Linda) – May 31, 2001
County of Orange (County of Orange) – May 31, 2001
City of Irvine (Irvine) – June 1, 2001
Irvine Ranch Water District (IRWD) – June 13, 2001
U.S. EPA (USEPA) – June 29, 2001
City of Westminster (Westminster) – July 3, 2001
Western States Petroleum Association (WSPA) – July 5, 2001
Building Industry Association of Southern California (BIA) – July 6, 2001
County of Orange (County) – July 6, 2001
The Irvine Company (TIC) – July 6, 2001
Orange County Sanitation District (OCSD) – July 9, 2001
Richard R. Horner, Ph.D. – July 19, 2001
Lawyers for Clean Water (LFCW) – July 20, 2001
Natural Resources Defense Council (NRDC) – July 20, 2001
Department of Health Service, Vector-Borne Disease Section (Vector Control) – July 31, 2001
Building Industry Association of Southern California (BIA-8/22) – August 22, 2001
City of Fountain Valley (Fountain Valley) – September 25, 2001
Santa Ana Chamber of Commerce (Santa Ana CoC) - September 25, 2001
Woodbridge Village Assoc. (Woodbridge) - October 2, 2001
OC Dept. of Education (OC Dept. of Edu.) – October 8, 2001
OC Fire Chief's Assoc. (OCFCA) - October 10, 2001
City of Huntington Beach (Huntington Beach) - October 12, 2001
McCutchen, et.al. (McCutchen) - October 12, 2001
City of La Habra (La Habra) - October 15, 2001
Lake Forest II Master Homeowner Association (Lake Forest MHA) - October 15, 2001
City of Brea (Brea) - October 17, 2001
City of Buena Park (Buena Park) - October 17, 2001
Huntington Beach School District (Huntington Beach City SD) - October 17, 2001
Burke, et.al. for City of Lake Forest (Burke – Lake Forest) - October 18, 2001
Burke, et.al. for City of Los Alamitos (Burke – Los Alamitos) - October 18, 2001
Burke, et.al. for City of Stanton (Burke – Stanton) - October 18, 2001
The City Engineer Association of Orange County (CEAOC) - October 18, 2001
City of Anaheim (Anaheim 10/18) - October 18, 2001
City of Fountain Valley (Fountain Valley 10/18) - October 18, 2001
City of Garden Grove (Garden Grove 10/18) - October 18, 2001
City of Westminster (Westminster 10/18) - October 18, 2001
Community Associations Institute (CAI) - October 18, 2001
Manatt (Manatt) - October 18, 2001

Natural Resources Defense Council (NRDC 10/18) - October 18, 2001
County of Orange (County of Orange 10/18) - October 18, 2001
Orange County Water District (OCWD) - October 18, 2001
Ramada Plaza Hotel (Ramada) - October 18, 2001
Westminster School District (Westminster SD) - October 18, 2001
Building Industry Association (BIA 10/19) - October 19, 2001
City of Costa Mesa (Costa Mesa) - October 19, 2001
City of Fullerton (Fullerton) - October 19, 2001
City of Irvine (Irvine) - October 19, 2001
City of Lake Forest (Lake Forest 10/19) - October 19, 2001
City of Newport Beach (Newport Beach) - October 19, 2001
City of Santa Ana (Santa Ana 10/19) - October 19, 2001
City of Tustin (Tustin 10/19) - October 19, 2001
City of Westminster (Westminster 10/19) - October 19, 2001
Construction Industry Coalition on Water Quality (CICWQ) - October 19, 2001
Irvine Ranch Water District (IRWD) - October 19, 2001
Kitselman Investments (Kitselman) - October 19, 2001
Orange County Coastkeeper (Coastkeeper) - October 19, 2001
Richard Horner, Ph.D. (Richard Horner 10/19) - October 19, 2001
Richards, et.al. for Brea, Buena Park, Seal Beach (Richards) - October 19, 2001
Debra Miller - Owner of Love's Barbeque in GG (Love's) - October 22, 2001
Stream House Comm. Association (Stream House) - October 22, 2001
Hy-Lond Home (Hy-Lond) - October 23, 2001
Souplantation & Sweet Tomatoes (Souplantation) - October 23, 2001
City of Garden Grove (Garden Grove 10/24) - October 24, 2001
Villageway Property Mgmt (Villageway) - October 25, 2001
Forest Gardens Moble Home Community (Forest Gardens) - November 2, 2001
Zlakets (Zlakets) - November 2, 2001
Foothill Ranch (Foothill Ranch) - November 5, 2001
Burke, et.al. for City of Lake Forest, Los Alamitos and Stanton (Burke 11/6) – November 6, 2001
Peking Gourmet Chinese Restaurant (Peking) – November 8, 2001
McDonald's (McDonald's) - November 9, 2001
Burke, et.al. for City of Los Alamitos and Stanton (Burke 11/12) – November 12, 2001
Feldsott & Lee for La Venezia Homeowners Association (Feldsott) - November 12, 2001
Natural Resources Defense Council (NRDC 11/14) - November 14, 2001
Richard R. Horner (Richard Horner 11/15) – November 15, 2001
City of Garden Grove (Garden Grove 11/19) – November 19, 2001
City of Tustin (Tustin 11/19) - November 19, 2001
County of Orange (County of Orange 11/19) - November 19, 2001
Irvine Ranch Water District (IRWD 11/19) - November 19, 2001

The comments from these letters are summarized below and responses are included. Only comments that have not been previously responded to are included below.

1. Comment - The requirements for new development as they pertain to compliance with 303(d) listed waters (Section XII.B.2.b) are inappropriate. The approach of limiting listed pollutant loads to pre-development levels pre-empts the development of the TMDL and its implementation plan, is inconsistent with Porter-Cologne (where post-development discharges are above pre-development concentrations, but are still below Basin Plan Objectives), and

will result in the expenditure of large sums of money without a significant benefit to water quality. (Garden Grove, Lake Forest, Los Alamitos, Santa Ana, Westminster, Anaheim, Tustin, Yorba Linda, County, Irvine, Buena Park, Manatt)

Response – The proposed Permit will be modified dropping the language holding post-development pollutant discharges to pre-development levels. Instead, the proposed Permit will prohibit post-development pollutant discharge loads, which cause or contribute to an exceedance of receiving water quality objectives.

2. Comment - The requirement that permittees control discharges "into" and from the MS4 (Sections II and X) goes beyond the mandate of the Clean Water Act. (Garden Grove, Lake Forest, Los Alamitos, Santa Ana, Westminster, Anaheim, Tustin, Yorba Linda, County of Orange, Irvine, BIA, Santa Ana CoC, Woodbridge, McCutchen, Lake Forest MHA, Buena Park, Manatt, Fullerton, Richards)

Response – Permit language regarding controlling discharges "into" the MS4 have been deleted from the proposed permit.

3. Comment - It is inappropriate to require municipal storm water agencies to take the lead in controlling leaks and spills from sanitary sewers and mechanisms to address failing septic systems do not belong in a storm water permit. (Garden Grove, Lake Forest, Los Alamitos, Santa Ana, Westminster, Tustin, Yorba Linda, County of Orange, Irvine, IRWD)

Response – The Tentative Order has been modified to require permittees to maintain their authority to prohibit the discharge of sewage to the MS4. In the case of septic systems, where failure may result in discharges of waste to the MS4, those systems must be controlled.

4. Comment - The municipal permit is not the appropriate mechanism to stipulate conditions for groundwater protection (Sections IV.1 and XII.B.4). (Garden Grove, Lake Forest, Los Alamitos, Santa Ana, Westminster, Anaheim, Tustin, Yorba Linda, County of Orange, Irvine)

Response – This Permit does not require infiltration, but presents it as an option. If there are concerns regarding the impacts to groundwater as a result of infiltrating storm water and non-storm water runoff, other structural and/or non-structural control options should be considered. However, where structural BMPs approved for a project include infiltration, groundwater must not be adversely impacted. Please note that similar requirements are included in both the Los Angeles Region's SUSMP and San Diego Region's Order WQ 2000-11, the MS4 permit for San Diego County, and both have been upheld by State Board.

5. Comment - The tentative order appears to require permittees to monitor, inspect and enforce construction and industrial sites that are already under State oversight through separate NPDES permits. Is the Regional Board transferring this responsibility to the cities? (Westminster, Tustin, Santa Ana CoC, Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest, Garden Grove 10/18)

Response – Federal regulations require the permittees to control the discharge of pollutants from industrial, including construction sites. 40 CFR 122.26(d)(2)(i) states that the permittees must demonstrate that they have adequate legal authority to control "the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity," prohibit "illicit discharges to the municipal storm sewer," control "the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water," and "carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer." Please note that implementation and enforcement of the State's General Permits will continue to be the responsibility of the Regional Board. However, at a number of these sites, the daily changes in site conditions and practices and the potential for discharges from these sites to cause or contribute to exceedances of water quality objectives require this extra level of local inspection and enforcement. (Also see the response to Comment 128)

6. Comment - While there is discussion in the Fact Sheet (Section V.I.d) regarding local sewering agencies accepting dry weather flows on a limited basis, IRWD notes that they discourage using the sanitary sewer system to collect and treat urban runoff and are working to develop a program to build and maintain wetlands intended to treat urban runoff (IRWD).

Response - Regional Board staff agrees that the diversion of dry weather flows to the sanitary sewer is, at best, a temporary solution. Diversion solutions can only handle dry weather flow volumes, do not address the problem of source control and can give the public the false message that "business as usual" is acceptable, since the diversion will handle it downstream. Staff is encouraged by IRWD's proposals for regional solutions, including wetlands treatment systems.

7. Comment – While the Fact Sheet (Section IX.8) discusses sewer leaks and spills and septic system failures as being responsible for a number of beach closures, there is no mention of other contributing factors such as vessel waste, wildlife and recreational activities themselves (IRWD).

Response - Section IX.8 of the Fact sheet is not an all-inclusive list of the contributing factors for beach closures. The Permit focuses on discharges to and from the MS4 systems; vessel wastes, wildlife, and recreational activities have minimal impact on flows through the MS4s.

8. Comment - Finding 5 identifies the San Joaquin Marsh as a single unit. The upper portion is in fact owned by IRWD and is being used to remove nitrogen from the watershed with continuous flow-through, and the lower portion is owned by the University of California Natural Reserve and is operated as a wetland sink with only occasional flow-through. (IRWD)

Response – While there may be different owners and uses for the upper and lower San Joaquin Marsh, those aspects are not specifically identified in Finding 5, therefore no revision will be made.

9. Comment – Finding 5 identifies lakes and reservoirs within Orange County, but only identifies those south of the 55 and 91 freeways. (IRWD)

   Response – Anaheim Lake is the only lake listed in the Basin Plan that lies generally north of the 55 and 91 freeways and will be added to the Permit.

10. Comment - Section VI.6.a-j of the permit requires the permittees to prohibit (or allow with adequate controls) a number of non-storm discharges to the MS4. If discharge to the MS4 is not allowed, there will be considerable pressure placed on sewer agencies to accept these flows. (IRWD)

    Response – There is nothing within the proposed Permit that suggests that any of these discharges should be diverted to the sanitary sewer. There are adequate BMPs, other than diversion, that can address these discharges.

11. Comment - The commenter requests that the permittees be required to accept wastes that are not acceptable for sanitary sewer discharge. (IRWD)

    Response – The Regional Board does not have the authority to require the municipalities to accept wastes that the local sewering agency does not deem acceptable for the sanitary sewer. There is nothing in this Permit that suggests that the wastes identified by the commenter should be diverted to the sanitary sewer. There are adequate BMPs that may be implemented to control these discharges other than diversion. Separate NPDES permits are issued for other types of discharges to the storm drain systems.

12. Comment - The requirement that local sewer agencies inspect and maintain sewer lines will require some agencies to spend substantial funds and the Regional Board should assist the agencies in securing grants to complete the work. (IRWD)

    Response – It is understood that the activities that are required of municipalities by this Permit and requirements, which may be imposed through the issuance of Waste Discharge Requirements for local sewering agencies, may result in additional expenditures by these agencies. Please note that OCSD has a program that provides matching funds and grants for some of these programs (also see 33). To the extent possible, staff will assist these entities in the investigation of and application for low-interest loans and grants.

13. Comment - As part of the toxics Total Maximum Daily Loads (TMDLs) being developed for Newport Bay and San Diego Creek, USEPA has identified a number of priority pollutants and other adverse analytes, which may be contributing to the impairment (Ag, As, Cd, Cu, Zn, DDT, PCBs, Chlordane, Dieldrin, Toxaphene, and Dicofol). The storm water permit should ensure that ambient monitoring plans include the analysis of these analytes. (USEPA)

    Response - Comment is noted. The 9/12/01 draft of the Monitoring and Reporting Program (M&RP) requires the permittees to update their monitoring plan by June 15, 2002. Further, both the Permit and M&RP include modification and reopener clauses especially designed to address the needs of the on-going TMDL program.

14. Comment - The monitoring program associated with the MS4 permit must be modified to ensure that the proper procedures are carried out to eliminate or minimize matrix interferences and improve method detection limits. (USEPA)

    Response - Comment is noted. The 9/12/01 draft of the Monitoring and Reporting Program (M&RP) requires the permittees to update their monitoring plan by June 15, 2002. Staff will confer with US EPA in reviewing this plan to ensure that it properly addresses these issues.

15. Comment - Sampling methods employed in the collection of water and sediment samples be enhanced to ensure that samples are representative of ambient conditions. (USEPA)

    Response - Comment is noted. The 9/12/01 draft of the Monitoring and Reporting Program (M&RP) requires the permittees to update their monitoring plan by June 15, 2002. Staff will confer with US EPA in reviewing this plan to ensure that it properly addresses these issues.

16. Comment – While the approach the Santa Ana Regional Board has taken is to encourage the permittees to develop practical programs that meet their respective needs, rather than across-the-board requirements imposed by the Regional Board, the commenter believes that a uniform guidance on Retail Gasoline Outlets (RGOs) would be helpful. It is suggested that the March 1997 California Stormwater Quality Task Force BMP Guide for RGOs be used as the guide to BMP requirements for RGOs. (WISPA)

    Response – The 1997 BMP Guide for RGOs can be used by the permittees as a starting point in drafting BMP requirements for RGOs. However, the permittees can require other BMPs, as they deem necessary.

17. Comment - The permit's focus on ensuring that urbanization does not significantly change the hydrology would seem to encourage sprawl and spreading development, at the expense of open space. In addition, this hydrological focus combined with other provisions will force an 'upstream' focus; such as regulating pollutants entering the MS4 appear to impede the use of watershed-based or regional solutions. (TIC, BIA)

    Response – The current draft Permit no longer requires maintaining pre-development site hydrology, but instead requires maintaining or minimizing downstream erosion and maintenance of stream habitat. However, maintaining pre-development hydrology to reduce the effects of urbanization on runoff flow and velocity will not directly lead to sprawl. The use of BMPs, such as infiltration galleries, semi-pervious surfaces and strategically placed regional BMPs should suffice. As to the upstream focus created by regulating pollutants entering the MS4, there needs to be a focus on source control. An end-of-pipe regional BMP cannot be the primary treatment/control BMP when that results in urban streams and channels (receiving waters), upstream of the regional BMP, not supporting their beneficial uses.

18. Comment – The Regional Board should consider revising the permit to clarify that the review and approval of watershed-based BMPs would not be a permit

modification, but would rather be part of the permit implementation by including an approval process and standards to be used by the Executive Officer in evaluating watershed-based or regional alternatives. (TIC, BIA)

Response – The language of the current draft Permit has been modified to ensure that adequate standards are written into Section XII.B, for use by the Executive Officer in the review and approval of the submitted plan(s).

19. Comment - Inclusion of water-quality based effluent limits (WQBELs), namely the receiving water limitations (Section IV) and waste load allocations (Section XVI) are inappropriate in a public storm drain permit. (TIC)

Response – This issue has arisen over the past several years due to the wording of the Clean Water Act section 402(p) that states that industrial dischargers must meet both Best Available Technology (BAT) and applicable water quality standards, but that municipal discharges must meet Maximum Extent Practicable (MEP) and "such other provisions that the Administrator or the State determines appropriate for the control of such pollutants." U.S. EPA, the State Board and Regional Boards have maintained that municipal discharges must meet water quality standards. While nothing prohibits the State and Regional Boards from requiring compliance with water quality standards through the application of numeric effluent limits, at this time the Boards have maintained that water quality standards may be met through the use of the iterative BMP process in place of numeric effluent limits.

20. Comment – The commenter notes that California has 9 of the nation's 10 least affordable housing markets and states that an Irvine preschool teacher would need a salary increase of $80,200 to afford a median-priced, Irvine home. It is implied that water quality regulations play a major role in the high price of housing. (BIA)

Response – Homes in many areas of Riverside County have a median price in the low $100,000's and homes in Irvine have a median price in the mid $300,000's, while both are subject to largely the same environmental regulations. It is not readily apparent that water quality regulatory activities, which are also essentially the same in both jurisdictions, play a significant role in this price difference. It is likely that proximity to water recreational activities in Orange County play a major role in house prices there. Any degradation in water quality could have adverse impacts on the local economy, including housing markets.

21. Comment - The requirement that the MS4 discharge not 'cause or contribute to' exceedances of receiving water standards and the requirement that the permittees implement control measures in a timely manner to comply with the 'cause or contribute' requirement will result in immediate non-compliance by all dischargers from day one of the Order. (BIA, Manatt)

Response – The ultimate goal of this proposed Permit, as well as the municipal storm water program as a whole, is for MS4 discharges to meet water quality objectives. However, where discharges do not meet water quality objectives, the permit allows for compliance through the implementation of an iterative BMP process,

with the goal of improving water quality with each iterative step; eventually achieving compliance with water quality objectives.

22. Comment – Language within the permit, such as 'minimize', 'limit', ' maximize', and 'preserve' are subject to wide discretion and problematic enforcement. (BIA, Santa Ana CoC, Manatt)

    Response – The terminology throughout this proposed Permit is specifically designed to allow the permittees the maximum flexibility in the implementation of the permit, while maintaining water quality.

23. Comment - The requirements to reduce runoff flows should not be included, since this is a water quality permit and there are no studies that have shown that increased runoff flows automatically contribute to exceedances of water quality standards. (BIA, Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest, Manatt)

    Response – The current draft Permit no longer requires maintaining pre-development site hydrology, but instead requires maintaining or minimizing downstream erosion and maintenance of stream habitat. However, no increase in post-development runoff flow and velocity remains a goal. U.S. EPA guidance points out that impacts on receiving waters due to changes in hydrology can often be more significant than those attributable to the contaminants found in storm water discharges.

24. Comment – The commenter points out that while the proposed permit requires the municipalities to review the CEQA and General Plan process, there does not appear to be language in the proposed permit to reflect the goal of increasing the housing supply. (BIA)

    Response – There are many issues that require consideration in formulating and implementing regulations. Commonly, collective terms are used for those issues that are not the major focus of the regulation. In this case, the goal of providing an adequate housing supply might fit under the category of "societal benefits" in the definition of "Maximum Extent Practicable."

25. Comment - The commenter suggests the following changes to new development categories (Section XII.B): set the residential threshold (10+ units) to the same as the commercial threshold (10,000 ft^2); eliminate hillside development as a category; and eliminate the environmentally sensitive area category, as the findings do not support such a category. (BIA)

    Response – Residential land use and commercial land use are sufficiently different, such that different thresholds are appropriate. Residences typically have many pollutant-generating activities and more importantly, are under less regulatory oversight. In the case of hillside development, even though the highest potential for erosion exists during construction, there exists a sufficiently high post-construction erosion potential to require additional protection. Finally, when the State Board withdrew Environmentally Sensitive Areas (ESAs) as a priority development project category from the LARWCB SUSMP in Order WQ 2000-11, Regional Boards were given the discretion of adding

Environmentally Sensitive Areas in future permits as long as a size threshold is provided. Section XII.B.g of the proposed Permit provides a size threshold of 2,500 square feet.

26. Comment - The commenter questions the practicality of reverting to a SUSMP policy similar to Regions 4 and 9, if the permittees are unable to produce an acceptable alternative plan by the deadline. They go on to state that since Region 9 has admitted that it will take 10 – 20 years to see water quality improvements as a result of SUSMPs, they are ineffective and may not even be worth a nominal cost. (BIA, Manatt)

Response – The water quality impairments due to rapid urbanization during the last few decades cannot be reversed overnight without very expensive and drastic measures, such as end-of-pipe treatment for storm water. The WQMP/SUSMP and other requirements in the proposed permit are technically and economically feasible, will prevent any further water quality degradation and will gradually improve water quality. It is understandable that improvements in water quality may not be seen for 10-20 years. The whole intent of requiring structural control BMPs in new development and substantial redevelopment is to prevent water quality and aquatic habitat degradation from getting worse. Further, the SUSMP or WQMP process allows these controls to be gradually implemented as new areas develop and old areas redevelop.

27. Comment - The decision in the Ninth Circuit Court of Appeals in Defenders of Wildlife V. Browner preempts the inclusion of Water Quality Based Effluent Limits (WQBELs), such a the requirement that the MS4 discharges do not violate water quality standards. (BIA, Manatt)

Response – The provisions in this proposed Permit do not require strict compliance with numeric effluent limits, only that the addition of MS4 discharges do not cause or contribute to violations of water quality standards. Instead of strict compliance with the water quality standards, the permit specifies an iterative process. Further, permit language providing for iterative BMP implementation/compliance with the Permit negates this claim.

28. Comment – Since the permit includes provisions that are not required by the Clean Water Act, such as WQBELs, the exemption from CEQA, provided by the California Water Code, does not apply. (BIA, Manatt)

Response – All provisions within the proposed permit implement or clarify specific federal regulations. The requirement that the permittees not violate water quality objectives is found in the federal NPDES regulations, is required by the Clean Water Act and is therefore exempt from CEQA.

29. Comment - Water quality objectives relied upon in the proposed permit's receiving water limitation section (Section IV), come from the Basin Plan and as such may not reflect all current statutory factors, such as economics and the need to develop housing in the region. (BIA)

Response – When many of the water quality objectives were established in early Basin Plans, there were no requirements to consider some of these factors and they

may or may not have been considered. As new water quality objectives are established, these factors will be taken into account. These factors will be considered in any revision of the water quality objectives. There is no requirement, however, to immediately revisit all water quality objectives in the Region.

30. Comment - The proposed permit's definitions of BMP as "… practices that are maximized in efficiency for the control of storm water runoff pollutants" and Maximum Extent Practicable (MEP) as "… the maximum extent possible, taking into account … gravity of the problem, [technical feasibility,] fiscal feasibility, public health risks, societal concerns, and social benefits" are not supported by the Federal Regulations. (BIA, Manatt)

    Response - The definition of "Maximum Extent Practicable" has been modified to read "… the maximum extent feasible, taking into account … gravity of the problem, technical feasibility, fiscal feasibility, public health risks, societal concerns, and social benefits." The definition for "Best Management Practice" will remain "… practices that are maximized in efficiency for the control of storm water runoff pollutants."

31. Comment – By requiring local authorities to implement land use controls, the Regional Board is attempting to encroach on the local government's jurisdiction. (BIA, Manatt)

    Response - The requirements in the proposed permit require that the permittees consider water quality in making zoning decisions and CEQA reviews. This in no way encroaches on the permittees jurisdiction, but requires local jurisdictions to expand their scope.

32. Comment – Where permittees do not have any control over their sanitary sewer systems, the permittees should work cooperatively with the sanitation districts to develop acceptable solutions to the problems of spills and infiltration of sewage to the MS4. (OCSD)

    Response - Comment noted.

33. Comment – The commenter has in place four programs to address inflow, infiltration, exfiltration and spills. These programs include matching funds and grants to local collection agencies to address inflow and infiltration; extensive training on spill reporting and response; use of closed circuit television to inspect lines; and, a contingency plan to prevent spills during high flow wet-weather conditions. (OCSD)

    Response - Comment noted.

34. Comment – Draft language referring to sanitary sewer lines that are "24-inches or larger" may not address the current problems, as blockages are far more likely to occur in the smaller sewer lines. Therefore, draft language should include sewer lines down to 4-inches. (OCSD)

Response - Regional Board staff isproposing to address this issue through a set of separate General Waste Discharge Requirements issued to the sewage collection agencies.

35. Comment – While individual agencies will likely want to tailor specific actions to their own systems and capabilities, a set of uniform principles in response and reporting activities would help to reduce impacts to the MS4 and receiving waters due to sewage spills. (OCSD)

Response - Comment noted. The proposed General Waste Discharge Requirements for sewage collection agencies includes these criteria.

36. Comment – The commenter recommends a greater future role for the permittees in ocean surf zone monitoring. Since the shoreline is predominantly impacted from land sources of bacteria and wet-weather events, the storm water permit should cover this area. (OCSD)

Response - Comment noted.

37. Comment - Commenter states that the DAMP is wholly inadequate to stem the diminishment of water quality and aquatic ecosystems associated with the growth of population and its support structure in Orange County. (Dr. Richard Horner)

Response - Please note that the DAMP is only one component of the Orange County storm water program. The DAMP, proposed MS4 permit requirements, and Report of Waste Discharge (ROWD), combined with major revisions and evaluations of many MS4 storm water components including, the Monitoring Program, New and Significant Re-Development, and SUSMPs, and the requirement for iterative BMP implementation are expected to provide the required water quality and aquatic ecosystem protection.

38. Comment – The Storm Water Five-Year Workplan requires the Regional Board's to inspect and audit <u>each</u> municipal entity at least once during every year of the permit term. Due to inadequate funding, the Regional Board's enforcement and audit program are virtually non-existent during the last ten years. (NRDC)

Response - The five-year workplan established a framework and setup goals and objectives for the State's storm water program. The goals and objectives were predicated upon full funding to implement this program. One of the program goals was to evaluate the municipal program annually through offsite and onsite audits. During the last eleven years, even with the limited resources allocated for the storm water program, we conducted both offsite and onsite audits and have taken a number of enforcement actions against municipalities for violations of the MS4 permits. A recent audit of the Regional Board's NPDES program by US EPA (p. 16-17) states, "RB8 conducts annual compliance inspections of their MS4 permittees" and on page 25 it states, "RB8 has developed a protocol for in-depth audits for the MS4 permittees". Therefore, NRDC's assumptions are not based on facts. Last year, the storm water program budget has been augmented. A review of our files will indicate that frequency of our municipal

program audits and our enforcement activities have significantly increased with the budget augmentation.

39. Comment - The permit is half as long as the draft Los Angeles permit. (NRDC)

Response - Comment noted.

39. Comment – Waste load allocations for each permittee should be included in the permit for each TMDL that has been adopted by the Board. The permit fails to adequately implement and coordinate TMDLs and water quality standards for impaired waterbodies. (NRDC/LFCW)

Response - Waste load allocations for each TMDL developed and approved are addressed and in place in the proposed MS4 permit.

40. Comment – There is no evidence to support the Permit's statement that it is anticipated that the goals and objectives of the storm water management regulations will be met or that significant progress has been made by the permittees during the past two permit cycles. The DAMP is not doing its part in improving water quality standards to the MEP. (NRDC)

Response - The ROWD and the annual reports provide information on the progress the permittees have made since the start of the MS4 program in Orange County and Volume I of the ROWD has information on water quality improvements in Orange County.

41. Comment – The Permit should discuss particular pollutants of concern as identified in current monitoring efforts by the permittees. (NRDC)

Response - The ROWD and the annual reports include a discussion on pollutants of concern. In addition, the revised (9/12/01) draft includes new requirements for revisions of the monitoring program. The revised monitoring program will include discussions on pollutants of concern based on current monitoring efforts.

42. Comment – There is a lack of anti-degradation analysis, which is required if a permit will allow an overall lowering of surface water quality. (NRDC, LFCW)

Response - The storm water monitoring results for Orange County for the last ten years indicate no degradation of water quality resulting from discharges regulated under this permit. Volume I of the ROWD discusses the water quality improvements from implementation of the programs and policies related to the storm water program. The proposed Permit includes additional requirements to control the discharge of pollutants. Based on available evidence and additional requirements specified in this Permit, there is no reason to believe that water quality degradation will take place upon implementation of the provisions of the proposed Permit and other programs (DAMP, monitoring program) and policies of the Orange County storm water program. NRDC's assertion that WQ 90-5 is applicable to this Permit is invalid because, unlike the permits discussed in WQ 90-5, this Permit does not allow the discharge of toxic

pollutants in greater quantity than had been allowed in previous permits. Therefore, no further anti-degradation analysis is necessary.

43. Comment – The deferral of compliance is unacceptable, especially with regards to permit elements that have been required since the 1990 Permit, such as a program to prevent illegal and illicit discharges. This is in violation of 40CFR 112.47 and 124(i). (NRDC, LFCW)

Response - The requirements specified in the 1990 and 1996 Permits have been met and the permittees have a program in place to prevent illegal and illicit discharges. There are time schedules included in the Permit for further improvements to these programs. This is not a deferral of compliance. Sections 122.47 and 124(i) apply to the issuance of permits to "new sources". As recognized by the State Board, the issuance of a MS4 permit to a municipality does not constitute an issuance to a "new source".

44. Comment – There is no evidence to support findings 36 and 37, no additional time is needed to determine if storm water discharges are causing or contributing to violations of water quality standards, and there is no evidence that the "iterative" process to assess the contribution of storm water has been implemented or that additional BMPs have been designed or implemented to correct violations. (NRDC, LFCW)

Response - These two findings refer to the receiving water limitations. The receiving water limitations included in the Permit are consistent with the language approved by the US EPA and the State Board and is the same as other MS4 permits.

45. Comment – Under 40 CFR Section 122.44, numeric effluent limits are mandatory since storm water has the reasonable potential to cause or contribute to the violation of water quality standards. (NRDC, LFCW)

Response - The issue of numeric effluent limits in MS4 permits has been appealed and decided by the State Board and the courts. Both the State Board (Memorandum from Craig Wilson to Edward C. Anton dated 03/15/01) and the Ninth Circuit Court of Appeals (9th Cir. 1999, 191 F.3d 1159) have determined that numeric effluent limits are not required in MS4 permits.

46. Comment – Permit Section III.4 is unclear where it refers to "written clearances issued by the Regional or State Board". (NRDC)

Response - That reference has been removed in the revised draft.

47. Comment – There is no evidence that the DAMP is designed to assure compliance with receiving water limitations and therefore, references to the DAMP should be stricken and the permittees should be directed to implement a storm water management program that is designed to assure that MS4 discharges do not cause or contribute to water quality violations and meet MEP. (NRDC)

Response - The 2000 DAMP in itself does not contain all the elements of the current Orange County storm water program elements. The first DAMP for the

Orange County program was developed and approved in 1993. This is a dynamic document and has undergone a number of changes and additions. The proposed Permit includes receiving water requirements as agreed upon by the US EPA and the State Board and these requirements are designed to assure that discharges from the MS4s do not cause or contribute to a violation water quality standards and also meet the MEP standard, as per 40 CFR 122.44.

48. Comment – Permit Section X.1 should indicate that municipal construction and industrial activities that require NPDES Section 402(p) permits must meet technology standards. (NRDC, LFCW)

Response - Municipal construction and industrial activities will be regulated on the same basis as non-municipal activities.

49. Comment – Permit Section XII, New Development is inconsistent with MEP because it fails to include a program requiring the installation of structural best management (SUSMPs) per the express direction of the Chief Counsel of the State Board. (NRDC, LFCW)

Response - The Permit language has been revised. SUSMPs, or equivalent programs, are required to be implemented for all new developments and significant redevelopments. However, we disagree with the commenters that the Chief Counsel directed all regional boards to have the same SUSMP requirements.

50. Comment – The catch-basin cleaning requirement of the Permit (80% per year) is inadequate. Since Los Angeles County and others have cleaned 100% per year, that sets the MEP standard. (NRDC, Newport Beach)

Response - As noted in their comment letter, while the position of the City of Newport Beach is that inspection & cleaning of 100% of a jurisdiction's catch basins represent MEP, they have not yet achieved that target. Further, when looking at the Los Angeles County draft MS4 permit, the permittees are required to prioritize catch basin locations, based on potential loading (sub-watershed land uses) and clean high priority catch basins on a monthly basis during the wet season. Consequently, Section XIV.7 requires the permittees to develop and implement a catch basin inspection/maintenance schedule similar to the proposed Los Angeles County MS4 permit.

51. Comment – The permittees should be required to undertake an inspection program of USEPA Phase I industrial facilities, automotive facilities and restaurants, per 40 CFR Sections 122.26(d)(iv)(A)(5) and (B)(1). (NRDC)

Response - The revised draft permit now has requirements for municipal inspection of construction, industrial, and commercial sites.

52. Comment – The permit's monitoring and reporting program is not adequate. (NRDC)

Response - The monitoring and reporting program has been revised.

53. Comment - BMPs that hold standing water (infiltration systems), even for a short period of time, may pose a nuisance and public health threat by providing vector habitat,

especially for mosquitoes. We would like for BMP plans to be submitted to the local vector control agency for review and approval. (Vector Control, Lake Forest 10/19)

Response - Section XII.A.6.d of the proposed Permit requires the permittees to consult with the local vector control agency to ensure that water quality wetlands, biofiltration swales, watershed-scale retrofits, etc. are designed to minimize the potential for vector breeding.

54. Comment - Orange County has a long history of water quality regulation that should not now be compromised by borrowing from other regions without the same track record. (BIA-8/22)

Response - It is very important to the regulated community that the regulatory environment be the same from jurisdiction to jurisdiction. We are sure you can appreciate how inconsistency can cause economic disadvantage.

55. Comment - Water quality in Orange County is clean by comparison to its neighbors. Los Angeles County has 168 impaired waters, San Diego County has 36 impaired waters and Orange County has 28 impaired waters, of which only eight lie within Region 8. With regard to addressing these impairments, Region 8 has three approved TMDLs, Los Angeles has one and San Diego, none. (BIA-8/22)

Response - Comments noted.

56. Comment - Since the late 1990's, approximately 1,000 new projects representing 10,000 acres, have been constructed in Orange County in accordance with the Water Quality Management Plan (WQMP) requirements. (BIA-8/22)

Response - While these projects may have been completed in accordance to their WQMPs, it is clear many of these developments were not always required to implement appropriate structural BMPs intended to reduce pollutant loads in runoff from the projects. The requirements specified in Section X of the proposed Permit are intended to provide water quality protection equivalent to that afforded by the SUSMP requirements specified by other regional boards.

57. Comment - The comprehensive approach of the proposed permit will address many of the contributing sources of water pollution. (Fountain Valley)

Response - Comment noted.

58. Comment - The restaurant inspection program will provide a positive effect towards achieving our mutual clean water goals, but it would be best implemented through a regional agency such as the Orange County Health Department. (Fountain Valley, Santa Ana 10/19)

Response - Comment noted. We agree that inspections by a regional agency, such as the Orange County Health Care Agency, is probably the best approach and that it will provide consistency throughout the County.

59. Comment - Recent scientific studies have shown that other sources, including broken sewer lines and bird waste from marshes, are the primary cause of sub-standard water quality, not runoff. (Santa Ana CoC, CAI)

Response - No references have been provided that substantiate the contention expressed in this comment. Further, it is not clear how the requirements of the MS4 permit should be changed in light of the facts concerning other unrelated sources of water quality degradation. If this comment is intended to imply that, since there are other sources of pollution, then we should not pursue water quality improvements through the subject MS4 permit, we obviously disagree and suggest that it is appropriate to address as many as possible of the known sources of water quality degradation.

The comment that bird waste is a primary cause of sub-standard water quality likely comes from a single study of the Talbert Channel, conducted by Dr. Stanley Grant of University of California at Irvine. One of Dr. Grant's conclusions was that resident birds in the marsh might have been responsible for a large portion of the enterococcus populations observed during the study. At no time has Dr. Grant attributed the extended closure of beaches in Huntington Beach, during the Summer of 1999, to bird waste. As for broken sewer lines, sewage spills have been responsible for many short-term beach closures. However, the concentration of pollutants in flowing coastal streams, flowing storm sewer discharge pipes and in the surf zones immediately adjacent to these discharges , clearly show that urban runoff contributes high pollutant loads to coastal receiving waters.

60. Comment - A study conducted by the County of Orange, on the financial impact of the San Diego Regional Water Quality Control Board on Southern Orange County projected that the cities and County would incur costs of $1.4 billion for infrastructure designed for a five-year storm event as well as employee and consulting costs of $14 million annually, resulting in a cost of $65 per month per household and $208 per month per business. As this study only addressed costs of meeting water quality standards and that language is virtually identical between the two permits, the study's findings apply to this permit as well. (Santa Ana CoC, Garden Grove 10/18, Fullerton, Irvine, Lake Forest 10/19)

Response - Orange County staff have testified that it would cost approximately $85 million over the 5 year life of the permit to comply with this permit, significantly less than suggested by this comment.

61. Comment - The Regional Board does not have the authority to require the municipalities to inspect industrial facilities because property rights laws preclude inspection of non-permitted facilities without probable cause. (Santa Ana CoC)

Response - The Clean Water Act (CWA) and the implementing regulations found at 40 CFR 122.26 must be interpreted in a manner to carry out the purpose of the CWA. The U.S. EPA's guidance on this issue makes it clear that the CWA and the federal regulations seek to impose an inspection responsibility on the permittees. There is an express requirement for permittees to demonstrate or obtain the authority to conduct inspections at 40 CFR 122.26(d)(2)(i)(F). To

the extent that cities do not presently possess authority to inspect, they will be required to establish such authority in compliance with this regulation.

62. Comment - Imposing structural BMP requirements on all urbanized properties, regardless of runoff water quality, is beyond the Regional Board's purview. The focus of the permit should be to establish a list of pollutants of concern, causes of these pollutants of concern and only then the implementation of BMPs that specifically address these pollutants of concern. (Santa Ana CoC, Richards)

Response - Federal NPDES regulation 40 CFR 122.44(d)(1) requires municipal storm water permits to include any requirements necessary to "[a]cheive water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." The term "water quality standards" in this context refers to a water body's beneficial uses and the water quality objectives necessary to protect those beneficial uses. USEPA has found that the level of imperviousness resulting from urbanization is strongly correlated with the water quality impairment of nearby receiving waters and further attributes much of this water quality impairment to changes in flow conditions from urbanization, stating that in many cases, the impacts on receiving streams due to high storm water flow rates or volumes can be more significant than those attributable to the contaminants found in storm water discharges. Furthermore, the proposed order does not impose structural BMP controls on all urbanized properties.

63. Comment - While the permit conditionally exempts landscape irrigation water, the requirement that conditionally exempted discharges "may not contain pollutants", may undercut the exemption when reclaimed water is used for irrigation. The Regional Board has an obligation to specifically recognize the importance of reclaimed water in the State's water conservation program, and exempt it from these regulations. (Woodbridge, Lake Forest MHA)

Response - Generally, reclaimed water use is regulated by the Regional Board under "Producer/User Recycling Requirements". As long as reclaimed water is used in accordance with the producer /user recycling requirements, we do not anticipate any problems. The Permit places no restrictions on the use of reclaimed water, and only indirectly applies to reclaimed water use to the extent that over-irrigation can result in reclaimed water entering an MS4. This cannot be considered an impact on reclaimed water use, for the Permit has no jurisdiction over correctly used reclaimed water, in that correctly used reclaimed water will never reach the MS4 in the first place.

64. Comment - If the Regional Board bans residential car washing, it's pointed out that State law clearly places enforcement of storm water regulations on the Regional Board, not homeowners associations. If the Regional Board wants to police driveways and write citations to residents who wash cars in their driveways, they can, but don't impose the responsibility on homeowners associations. (Woodbridge, Lake Forest MHA)

Response - The proposed order does not prohibit non-commercial car washing (see Section III.3.i of the Tentative Order).

65. Comment - Orange County has $10 million in watershed studies underway. The regional solutions that will come out of these studies will be far superior to the Regional Board's draft regulations. Therefore the Regional Board should wait for the conclusion of these studies, then draft a set of regulations encouraging more effective and less costly solutions. (Woodbridge, Lake Forest MHA)

    Response - It is thought that regional solutions, such as constructed wetlands, can solve or help to solve many water quality impacts associated with increased urbanization. However, project specific solutions will also be required to address many of these impacts. By identifying BMPs during the planning stages of development and implementing those BMPs during development, the BMP feasibility will be increased and costs will be decreased, versus retro-fitting those developments after construction. Further, as soon as the watershed studies result in the availability of regional or sub-regional solutions, this permit encourages the county to seek approval for these alternatives.

66. Comment - The majority of school sites in the county have added portable classrooms to their campuses. When these are combined with modernization efforts, deferred maintenance and other construction projects, it will result in site-by-site solutions with only marginal water quality improvement. It's recommended that land use would be relevant to the degree and type of regulation and enforcement to which a given facility is subject. (OC Dept. of Edu., Huntington Beach City SD, Westminster SC)

    Response - While site-by -site solutions will, in all likelihood, still be required to address some water quality impacts resulting from redevelopment, regional solutions can also be used where appropriate. However, where portable classrooms are installed on existing blacktop, no increase in impervious surfaces will result, and compliance with the New Development/Significant Re-Development requirements will not be necessary.

67. Comment - The permit sections affecting the delivery of fire services should be balanced and reflect regulatory requirements while addressing the operational needs of the fire service. (OCFA)

    Response - Comment noted, and revisions have been made to the permit language regarding flows associated with emergency flows and non-emergency fire service related flows.

68. Comment - Runoff associated with non-emergency fire fighting is essentially clean, potable water that becomes contaminated when flowing to the MS4. It's pointed out that regular street sweeping and more frequent catch basin cleaning will assist in preventing and/or reducing contamination of this runoff. (OCFA)

    Response - Comment noted.

69. Comment - Commenter supports the general principles behind the numeric sizing criteria outlined in this Order and believes that some level of increased inspection and monitoring will better protect and enhance water quality. However, the ability of inspectors to add these elements to their normal duties or available funding to hire additional inspectors, is questioned. (Huntington Beach)

Response – In response to concerns expressed by the permittees regarding the scope and schedule for municipal inspections of private construction, industrial and commercial sites, the requirements and implementation schedules have been changed.

70. Comment - Many of the implementation schedules presented in the Order are too strict, given the time frame necessary to identify and secure additional funding sources as well as hire sufficient staff. (Huntington Beach, CEAOC, Anaheim 10/18, County of Orange 10/19,Fullerton, Irvine, Lake Forest 10/19, Santa Ana 10/19, Richards)

Response - In response to concerns expressed by the permittees regarding the implementation schedule for many of the requirements contained in the proposed permit, some of those implementation schedules have been extended to allow the permittees additional time to secure funding, hire and train additional staff and to meet the legal time restraints associated with changes to local ordinances and policies.

71. Comment - The 30% compliance rate of approved projects meeting existing Water Quality Management Plan (WQMP) requirements reported by Regional Board staff during the September 26, 2001 Public Workshop is alarming. For projects in Huntington Beach, structural Best Management Practices are a standard requirement. Further, the City has hired a highly qualified professional into a new Environmental Engineer position, focusing exclusively on water quality issues. (Huntington Beach)

Response - Comment noted

72. Comment - It is critical that all cities, including inland cities in Riverside and San Bernardino, be expected to protect and preserve water resources by implementing permit requirements identical to those found in this order. (Huntington Beach, CEAOC)

Response - Comment noted. The draft order for San Bernardino County areas has similar requirements and Board staff will propose similar requirements for the Riverside County permit.

73. Comment - Requirements involving CEQA review changes, watershed policies, additional sanctions in ordinances and discharge limits should be dealt with at a statewide level. (Huntington Beach)

Response - Comment noted. We would support efforts to address these issues at a statewide level.

74. Comment - The municipalities will be financially impacted by the costs of increased training, inspections, testing, reporting, monitoring and enforcement activities required in the proposed permit. (La Habra, CEAOC, Feldsott)

Response - We agree. It is expected that water quality improvement efforts required by the federal storm water program will financially impact the municipalities.

75. Comment - The focus of the permit has shifted from a program with emphasis on regional-scale BMPs, focused on pollutants of concern and watershed restoration, to a land-use based program with an emphasis on the development of inventories, rigid inspection programs and control of individual facilities for compliance with ordinances and permits. (La Habra, Brea, CEAOC, Fullerton)

    Response - This permit contemplates a multi-faceted approach to address storm water and non-storm water quality effects. We prefer a regional or sub-regional control strategy, but will accept a SUSMP approach, as an alternative. We also believe that on-site inspections are an important component of this permit.

76. Comment - The requirement that the Water Quality Management Plans (WQMPs) be applicable to the same categories as the Los Angeles and San Diego Standard Urban Stormwater Management Plans (SUSMPs) removes the flexibility that the municipalities need to optimize the reduction of pollutants on a location-by-location basis. It will require that permittees focus solely on specific categories of sites to the exclusion of other sites that may be creating more significant water quality problems (Brea, Richards)

    Response – The proposed permit provides a framework for the minimum requirements necessary for the permittees to meet the maximum extent practicable standard. This includes the major categories of new development and significant redevelopment contained in the Los Angeles and San Diego SUSMP programs. However, within that framework, the municipalities are provided the flexibility and discretion to: select the BMPs to be implemented by developers that will result in the best performance for the minimum cost; prioritize watersheds, 'new development' categories, commercial and industrial activities; and choose the enforcement actions which will result in the highest level of compliance. The setting of minimum standards should not be misrepresented as eliminating flexibility.

77. Comment - An emphasis should be put on regional solutions. (Buena Park)

    Response - There is nothing in the proposed permit that will limit the appropriate use of regional solutions, such as constructed wetlands. In fact, language in Section XII.B, New Development (Including Significant Re-Development), specifically points out that approved regional solutions can play a role in the reduction of required, on-site structural BMPs.

78. Comment - EPA's definition of 'significant redevelopment' in Phase II final rule is the disturbance of equal to or greater than 1 acre of land. There is no evidence to support the use of a 5,000 square foot threshold (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

    Response - The definition of 'significant redevelopment' as the disturbance of equal to or greater than 5,000 square feet is same as that adopted in the original Los Angeles Regional Board SUSMP Order and the San Diego Regional Board, San Diego County MS4 Permit, both of which have been reviewed and upheld by State Board.

79. Comment - The requirement that new development contain BMPs meeting numeric sizing criteria prescribes how the permittees are to meet the requirements of the permit and is a violation of Section 13360 of the California Water Code. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

Response - The draft order specifies a design criteria for a specific kind of structural BMP. However, the order also provides options for other alternatives. The draft MS4 permit does not violate the restriction in Water Code section 13360 on the Regional Board identifying the "design" or "particular manner" in which a permitee shall comply with the permit. Water Code section 13360 restricts the Regional Board from specifying the manner of compliance with the permit. Specifically, the Regional Board may not specify the "design" or "particular manner in which compliance may be had." (Water Code, 13360.) At the same time, Water Code section 13377 provides that, notwithstanding section 13360, the Regional Board shall issue waste discharge requirements "which apply and ensure compliance with all applicable provisions of the [Clean Water Act]."

80. Comment - The sections in the Order that require permittees to review and revise their general plans and CEQA review process to include watershed protection principles prescribe local land use requirements on cities in violation of the separation of powers doctrine. Further, the specific language requiring preservation of wetlands, riparian corridors, and buffer zones, as well as, maximizing the percentage of permeable surfaces would seem to prohibit any development of undisturbed areas and would cause the cities to face "takings' claims by property owners seeking to develop their land. It is recommended that these provisions be converted to an option, instead focusing on conditions that require the co-permittees to reduce the discharge of pollutants to the maximum extent practicable. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest, Manatt, Irvine)

Response - Section XII.A, New Development (Including Significant Re-Development), has been modified to direct permittees to review their general plans and CEQA review process in terms of the principles noted in their respective sub-sections. After review, permittees are to revise their general plans and CEQA review process as necessary and report to the Executive Officer, the results of the review and actions taken.

81. Comment - State Board guidance in SWRCB WQ99-05 excised the "cause or contribute" language from Order 98-01 and provided the language that must be used in municipal storm water permits. In addition, the "or contribute" prohibition, of even de minimis contribution ignores the Clean Water Act's 'maximum extent practicable' standard. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest, Manatt, County of Orange, Richards)

Response - The "cause or contribute" language found in Section IV.1, Receiving Water Limitations, is essentially identical to that found in the Receiving Water Limitation section of SDRWQCB 2001-01, which states that "Discharges from MS4s that cause or contribute to the violation of water quality standards … are prohibited." The State Board in WQ 2001-15, found the Receiving Water

Quality Limitations in SDRWQCB 2001-01 consistent with SWRCB 99-05. Therefore the "cause or contribute" language will remain.

82. Comment - Part III.1, Discharge Limitations/Prohibitions, implements the requirement of 40 CFR 122.26(d)(2)(i)(B), but fails to cite the reference. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

Response – The proposed permit has had the citation added.

83. Comment - In the preamble to the promulgation of the Phase I regulations, EPA states that "EPA views gas stations as retail commercial facilities not covered by this regulation." In view of EPA's statement, the new development categories gas stations (XII.B.1.i) and restaurants (XII.B.1.e) should be deleted. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

Response - In compliance with the Phase I section referred to by the comment, the Regional Board does not regulate Retail Gasoline Outlets (RGOs) as industrial facilities that require separate storm water permits. The Tentative Order considers RGOs to be commercial and are included in the SUSMP requirements due to their potential as a significant source of pollutants to urban runoff.

84. Comment - The date for the definition of 'New Development' should be changed to the effective date of the Order. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

Response - Comment noted.

85. Comment - Section 1068(c) of the Intermodal Surface Transportation and Efficiency Act of 1991 (ISTEA) granted an exception for certain facilities owned or operated by municipalities with populations under 100,000 which was extended by EPA when it promulgated the Phase II final rules. Therefore, Section XV, Municipal Construction Projects/Activities, should reflect that until March 10, 2003, storm water discharges associated with industrial activity, including construction, that are owned or operated by a municipality with a population under 100,000 are exempt from the need to apply for or obtain a storm water discharge permit. (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

Response - The permittees have been under a Phase I Storm Water Permit since 1990 and do not qualify for the Phase II exemption for small municipalities with populations less than 100,000. This finding was based on the Federal Regulations identification of physically interconnected MS4s in which small municipalities with populations less than 100,000 own or operate MS4s that substantially contribute to the pollutant loadings of a physically interconnected MS4s of larger Phase I communities regulated under the NPDES program for storm water discharges. Municipalities incorporated since the First and Second Term Permits were adopted assumed the responsibilities for the discharge of urban runoff from their MS4s. Under Order No. 96-31, the second term permit, the Copermittees were required to comply with all "terms and conditions of the latest version of the State's General Construction Activity Storm Water Permit that are applicable" except filing a NOI with the State

Board. This included preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring program consistent with the State's General Construction Activity Storm Water Permit. Under the Tentative Order, the Copermittees will continue to comply with the State's General Construction Activity Storm Water Permit by filing the NOI with the Regional Board and preparing and implementing a monitoring program and SWPPP.

86. Comment - The term" Dumpster ™" is a trademark registered to the Dempster Company and should be replaced with the generic term "trash bin." (Burke-Los Alamitos, Burke-Stanton, Burke-Lake Forest)

Response - Comment noted and the Tentative Order has been changed accordingly.

87. Comment - The State Water Resources Control Board should work with legislators to introduce and pass laws which would give municipalities the clear right to impose storm water quality fees or provide a dedicated State funding source similar to the Gasoline Tax program. (CEAOC)

Response - The State Water Resources Control Board would be willing to assist legislative efforts towards passing laws that would give municipalities the authority to impose storm water quality fees. This assistance would be limited to providing evidence that would support the need for strict enforcement programs.

88. Comment - Based on the potential cost of fully implementing the requirements of the draft permit and the need to determine if there are more cost-effective alternatives or if the cost is reasonable, relative to the benefit, it's requested that the draft permit undergo an internal review to consider the relative effectiveness and overall benefit. (Anaheim 10/18)

Response - The public adoption process for the Tentative Order enables to the Regional Water Quality Control Board to consider all potential impacts, both beneficial and detrimental, consistent with the public interest. The regional board is not required to undertake a formal Cost/Benefit Analysis, or other comprehensive economic analysis for the issuance of waste discharge requirements. While regional boards are required to consider economic factors in the development of basin plans (W.C. 13241), regional boards are not specifically required to undertake Cost/Benefit Analysis. Neither do federal regulations compel reliance on any particular form of economic analysis in the implementation of requirements based on the MEP performance standard; the admonition quoted from 64 Fed. Reg. 68722 & 68732 calls for flexible interpretation of MEP based on site-specific characteristics and "cost considerations as well as water quality effects…." Thus, while the regional board is advised to consider costs as a factor in determining the reasonableness or practicability of requirements, there is no state or federal mandate for a more formal economic analysis involving the development of Cost/Benefit or Cost-Effectiveness relationships.

89. Comment - The municipal inspection requirements appear not to be reasonable or even productive relative to their costs. In most cases the Regional Board already has permits for the locations/activities to be overseen by these programs. Although it is a good idea to impose a system, which prevents threats to water quality from "falling through the cracks", the duplication of efforts could result in

confusion among industries and developers as to the agency in authority over the General Industrial and Construction permits. (Anaheim 10/18)

Response – Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that each permittee must demonstrate that it can control "through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial activity and the quality of storm water discharged from site of industrial activity." These ordinances must be applied at all industrial sites to ensure that pollutant discharges to the MS4 are reduced to the maximum extent practicable and permit requirements are met. Furthermore, 40 CFR 122.26(d)(2)(iv)(C)(1) requires that municipalities "identify priorities and procedures for inspections and establishing and implementing control measures…" for discharges from industrial sites that the municipality determines are contributing a substantial pollutant loading to the MS4. Regarding enforcement at industrial sites, the US EPA further states, "The municipality, as a permittee, is responsible for compliance with its permit and must have authority to implement the conditions in its permit. To comply with its permit, a municipality must have the authority to hold dischargers accountable for their contributions to separate storm sewers" (1992). Regional Board staff will work with the permittees to avoid duplicative efforts at industrial facilities regulated by the State.

90. Comment - If the proposed Permit were to be adopted, virtually all food service establishments will be required to install grease traps. (Fountain Valley 10/18, Westminster 10/18, Marie Calendar's, Ramada, Love's, Hy-Lond Home, Souplantation, Zlaket's, Peking, McDonald's)

Response - There is nothing in the proposed permit which will require or mandate that cities require food service establishments to install grease traps or interceptors.

91. Comment - Given that most beach closures are actually due to leaking sewage infrastructure, widespread implementation of BMPs at storm drain openings would place an excessive burden on taxpayers and have a marginal effect. (Fountain Valley 10/18)

Response - Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B)(4) requires a description of a program to prevent, contain, and respond to spills that may discharge into the municipal storm sewer. This includes any type of spill that may add to the pollutant load of the MS4. As used in the Tentative Order, the phrase "shall prevent…all sewage and other spills that may discharge into its MS4…" requires the permittees to implement reasonable pollution prevention actions that seek to prevent the occurrences of such spills because these spills have been found to frequently enter the MS4 and be discharged to receiving waters. Although leaks from the sewage infrastructure may be a leading cause of beach closures, other potential threats can not be overlooked, based upon cost alone. Assessment of permittee compliance would involve a determination of whether the permittee had taken appropriate pollution prevention measures and whether the response to spills met the conditions of the Tentative Order.

92. Comment - The Order imposes extensively overly prescriptive obligations on the permittees with respect to industrial, commercial and construction sites. (Garden Grove 10/18)

    Response - The Tentative Order contains the framework for the minimum requirements considered by the SARWQCB to be necessary to achieve MEP. The requirements in the Tentative Order are based on the Federal NPDES regulations and USEPA and SWRCB guidance. Where the Tentative Order is more specific than the Federal NPDES regulations, it is based on USEPA and SWRCB guidance. The Regional Water Quality Control Board has authority to include more specific requirements than the Federal regulations under CWA section 402(p)(3)(B)(iii) and CWC section 13377. While the Tentative Order includes requirements for widespread BMP implementation for specific categories of existing and planned land use, it does not require use of any particular BMPs. The Tentative Order actually encourages implementation of combinations of BMPs, and further does not preclude any particular BMPs or other means of compliance. A permit which allows for seemingly infinite means for achieving compliance does not specify the design or manner of compliance in violation of California Water Code section 13360.

93. Comment - To date, the City of Garden Grove has constructed less than one quarter of its Master Plan storm drain system and does not anticipate completion within the next 20 years. Therefore, new development may be forced to install new storm drain systems to comply with flow-based BMPs, making new development in Garden Grove fiscally undesirable. (Garden Grove 10/18)

    Response - Flow-based BMPs in regards to storm drain systems for new development and/or significant redevelopment will fiscally impact all communities in the same manner. Because land use planning and zoning is where urban development is conceived, it is the phase in which the greatest and most cost-effective opportunities to protect water quality exists. When a permittee incorporates policies and principles designed to safeguard water resources into its General Plan and development project approval processes, it has taken a far-reaching step towards the preservation of local water resources.

94. Comment - The City of Garden Grove has issued entitlements to projects that are in advanced stages of planning. Requiring additional BMPs would be problematic at this point, therefore projects with current entitlements should be exempted from additional BMP requirements. (Garden Grove 10/18)

    Response - For the purpose of clarification, the Tentative Order is not requiring additional BMPs. The Regional Water Quality Control Board understands that when the Order is adopted, certain modifications may be necessary to currently 'entitled projects'. However, BMP requirements shall remain unchanged. Also see the definition of "New Developments" at Footnote 4 in the Tentative Order.

95. Comment - The list of monitoring requirements needs to provide more flexibility based on the current science. (Garden Grove 10/18)

    Response - The monitoring requirements have been changed to allow the permittees to develop a new monitoring program by July 1, 2003, which will include, at a

minimum, the monitoring components outlined in the Monitoring & Reporting Program, Section III.2. These monitoring components are based on and strongly supported by the scientific data responsible for the promulgation of Federal NPDES regulations and the California Water Code. The permittees must conduct a comprehensive monitoring program, as required under Federal NPDES regulations 40 CFR 122.26(d)(2)(iii). Standard provisions for NPDES permits are generally found in Federal NPDES regulation 40 CFR 122.41. The CWC sections 13377, 13267, and 13225 support the monitoring requirements contained in the Tentative Order.

96. Comment - EPA's review of the Santa Ana Regional Water Quality Control Board's NPDES program found that, in 2000, with a few relatively minor exceptions, the permit should ensure compliance with MEP and other applicable requirements of the Clean Water Act. The existing program should not be replaced with onerous and untried requirements. (Garden Grove 10/18)

Response – That review was conducted almost two years ago. Given the changes in what constitutes "Maximum Extent Practicable" in a Phase I MS4 program in that time, required improvements to the Orange County MS4 permit were inevitable. Further, the requirements in the proposed permit are neither onerous nor untried. The implementation of structural BMPs at individual project sites, also known as SUSMPs, is a based on the evolution of a requirement that existed in the 1996 Orange County MS4 permit and has been implemented by the municipalities. The incorporation of watershed protection principles into general plans and CEQA review again, should not be a new concept, but the requirement has been further defined in the proposed permit. Finally, an inspection program is a fundamental part of most MS4 programs across the country and closely mimics the pre-treatment inspection program conducted by sanitation districts. This is particularly significant when one considers that even though sanitation district discharges are treated, usually highly treated, prior to discharge, inspection of facilities that contribute to that discharge is warranted. In the case of storm water collection systems, usually no treatment is performed prior to discharge, making inspection of facilities that contribute to the discharge even more important.

97. Comment - The permit's "zero tolerance" standard prohibiting any pollutant from entering the storm drain system from private residences and streets would result in individual homeowners and homeowners associations expending an extraordinary expense to comply with the permit. (CAI, Feldsott)

Response - The proposed order requires reduction of pollutants in storm water runoff to the maximum extent practicable. The Drainage Area Management Plan (DAMP) and other programs and policies being developed and implemented by the County and the Cities in Orange County in accordance with the requirements specified in the permit are consistent with this maximum extent practicable standard (e.g., see Receiving Water Limitation IV, Item 3, Provision XIX, Item 1,….). In developing the DAMP and other programs and policies, technical feasibility, fiscal feasibility, public health concerns, and social benefits must be considered. The permit is not intended to impose requirements that are not technically and economically feasible. The permit language has been modified at a number of places to clarify this and the permit in fact recognizes certain

types of non-storm water discharges as suitable for discharge to storm water conveyance systems (e.g., see Discharge Limitation, III, Item 3).

98. Comment - While the permit conditionally exempts landscape irrigation water and private auto wash water, if those sources have pollutants, they would be prohibited along with runoff from homeowners hosing off their driveways and patios or the sidewalk in front of their house. (CAI)

Response - See responses to Comments 63, 64 and 97.

99. Comment - The permit could enable local municipalities to shift the responsibility for the development of a qualifying plan and the implementation of facilities to the local homeowners association. (CAI)

Response - Section XII.B, New Development (Including Significant Re-Development) specifically requires that the Water Quality Management Plans (WQMPs) identify the party responsible and funding source(s) for the operation and maintenance of these BMPs prior to construction. There is nothing within the proposed permit that would give the permittees any more authority than they currently possess, to require a homeowners association to accept the responsibility for maintenance and operation of these BMPs.

100. Comment - In Section X, Criteria For Accepting Runoff into the MS4, item 2, which requires that the permittees ensure that discharges from non-municipal industrial and constructions sites entering the MS4 system meet technology-based standards, be modified to reflect the Maximum Extent Practicable standard. (Manatt)

Response - Section X, Criteria For Accepting Runoff into the MS4, has been deleted from the proposed permit.

101. Comment - In Section XII, New Development (Including Significant Re-Development), the statement in A.4, that "Each permittee shall minimize the short and long-term impacts on receiving water quality from new developments and re-developments, " should be modified to reflect the Maximum Extent Practicable standard. (Manatt)

Response - That statement has been modified to reflect that the minimization will be through implementation of revised WQMP requirements.

102. Comment - The requirements to incorporate watershed protection principles into the General Plan and related documents should be modified to reflect the Maximum Extent Practicable standard. (Manatt)

Response - The MEP standard should not be applied during the incorporation of watershed protection principles into general plans and related documents rather, the MEP standard should be used in the application of those principles in the execution of the plan.

103. Comment - In Section XII, New Development (Including Significant Re-Development), the categories should be selected based on tangible scientific data. Prior to

finalizing these categories, the Santa Ana Board must provide evidence showing that these categories are in fact of higher concern in relation to water equality improvement. (Manatt)

Response - The categories presented in Section XII.B, New Development (Including Significant Re-Development), are similar to those adopted in the Los Angeles Regional Board SUSMP Order and the San Diego Regional Board, San Diego County MS4 Permit, both of which have been reviewed and upheld by State Board in the area of these selected categories.

104. Comment - Footnote 4 should define new development as projects for which tentative map or parcel map was "submitted" by September 26, 2001, rather than "approved". (Manatt)

Response – This is a permit that sets requirements for the municipalities. As such, the municipalities must have the ability to control, to an extent, what BMPs are implemented at projects within their jurisdiction. By retaining the "map approval" trigger language, the municipalities will be in a better position to fulfill their responsibility of reducing, to the maximum extent practicable, pollutant loading from their MS4 to receiving waters, in order to meet receiving water quality limits.

105. Comment - The Permit's volume and flow-based structural BMP requirements for new development and re-development are arbitrary, unreasonable and inconsistent with MEP. Further, they bear no relationship to actual pollutant reduction and are requiring permittees to treat site runoff, regardless of its contents or the effects of runoff on receiving water quality. (Manatt)

Response - The Tentative Order illustrates structural BMP requirements by providing a framework and a standard that the permittees must meet. This represents the Santa Ana Regional Water Quality Control Board's (SARWQCB) definition of the minimum standards necessary to meet MEP and protect receiving water beneficial uses. California Water Code (CWC) section 13360 generally prohibits the Regional Boards from specifying the manner of compliance with state waste discharge requirements. However, CWC section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Since the Tentative Order is written to implement CWA requirements, it does not violate section 13360 for the SARWQCB to include specified programs of Best Management Practices (BMPs) to be implemented by the municipalities in order to carry out CWA requirements. Specificity is even more crucial in waste discharge requirements for storm water discharges, given the absence of numerical effluent limits. In order to reduce storm water pollution to the maximum extent practicable (MEP), the Tentative Order must require specific styles of BMPs (i.e., structural or source control), but that is not to say that the SARWQCB is dictating one specific BMP to accomplish the task. The municipalities often have many BMPs available to accomplish this task.

106. Comment - Under California Water Code Section 13263, the Board is required to consider all the factors listed in California Water Code Section 13241 when issuing an MS4 permit, thus the Santa Ana Board must demonstrate that the permit's requirements are "reasonably achievable" in light of "economic considerations." (Manatt, City of Lake Forest 10/19)

Response - Several of the commenters assert that the provisions of section 13241 of the CWC directly apply to the adoption of the Tentative Order. Section 13241 clearly applies to the development of water quality objectives. It includes a list of "factors to be considered by a regional board in establishing water quality objectives." Therefore, Section 13241 applies only to the development of water quality objectives designated in the Basin Plan. These water quality objectives are developed during the Basin Plan's planning process, not during adoption of permits meant to implement the Basin Plan (see section D.1 for further discussion). As such, the provisions of 13241 are met by the SARWQCB during the process of adoption and re-issuance of the Basin Plan, as well as during the Triennial Review of water quality standards the SARWQCB conducts pursuant to the Clean Water Act. Moreover, to the extent that the comment suggests that the Regional Board must conduct a cost-benefit analysis by demonstrating that the water quality benefits outweigh the economic costs, the SWRCB has rejected that argument. (SWRCB Order WQ 2000-11, pp 19-20.)

107. Comment - The commenter is concerned that a provision requiring that pre-development hydrology be maintained after development with respect to both quality and flow components has been deleted. (NRDC 10/18)

Response - The November 5, 2001 draft of the permit includes a requirement that the permittees shall incorporate into their development standards and conditions of approval a requirement that changes in hydrology and pollutant loading be minimized, and that controls, including both structural and non-structural BMPs, be incorporated to mitigate the projected increases in pollutant loading and flows and to ensure that post-development runoff rates and velocities from a site have no significant adverse impact on downstream erosion and stream habitat.

108. Comment - Staff's responses to comments addressing the adequacy of the DAMP and associated Permit findings (Nos. 34, 37, 38, 40, 44, 47, 50, and 51) are superficial and conclusory. (NRDC 10/18)

Response - We believe that the November 5th draft and responses to comments, considered in total, address this comment.

109. Comment - The EPA's NPDES Program Implementation Review – Final Report, Santa Ana Regional Water Quality Control Board (April 16, 2001) states that the Regional Board has "fallen short in maintaining … targeted audit frequency." Will the Region meet State requirements for municipal audits? (NRDC 10/18)

Response - It is well-known that the EPA's finding was made prior to the availability of increased staff resources for the Storm Water Program. The SARWQCB has prepared an auditing program to be administered to each permittee throughout

Orange County. This program shall be implemented directly following the adoption of this Order.

110. Comment - There is not sufficient evidence in the record to support the fact that the proposed Permit and DAMP, taken together, will result in a program that meets the maximum extent practicable standard or receiving water limits. Staff must support, with reasoned analysis and evidence in the record, that the proposed permit and DAMP will result in a legally adequate program to control storm water. (NRDC 10/18)

Response - We disagree with this comment. The proposed Orange County MS4 permit has been the subject of three public workshops. The testimony provided by staff during these workshops and the background materials provided in both the Fact Sheet and Findings of the November 5, 2001 draft provide appropriate and adequate evidence that the proposed permit and the DAMP will result in a legally adequate program to address storm water issues within the Santa Ana River watershed of Orange County.

111. Comment - The overall goals of the Public Outreach and Education section are vaguely described and weak. The report to which both the proposed permit and the DAMP refer, Final Report – Recommendation for Expanding the Orange County Stormwater Program's Public and Business Outreach Program (PS Enterprises; September, 1999) is so general in tone and with respect to recommendations, that it is impossible to conclude that, even if fully implemented, it would meet the appropriate maximum extent practicable standard. (NRDC 10/18)

Response – The Public Education and Outreach requirements of the proposed permit are found under Section XIII. These permit requirements include many public education and outreach activities and responsibilities of the permittees, and compliance with these provisions should constitute an effective program. Staff will monitor compliance with these provisions of the permit to further determine its effectiveness.

112. Comment - The proposed permit only requires 10 million annual impressions whereas the Los Angeles permit requires 35 million. Further both the Los Angeles and San Diego Permits include specific requirements regarding target communities and minimum information. (LFCW, NRDC 10/18)

Response - This comment is that "only" 10 million impressions are required as part of the public education and outreach program, compared to the 35 million impressions required by the Los Angeles permit. A comparison of the populations of the two subject areas will demonstrate that the number of impressions required per capita is essentially the same.

113. Comment - Sections VIII, Municipal Inspections of Construction Sites and XV, Municipal Construction Projects/Activities, do not require that all sediment and other pollutants be retained on site, compared to the Los Angeles proposed permit at 48. Further, these sections fail to require that Storm Water Pollution Prevention Plans be reviewed and implemented for sites between 1 and 5 acres. (NRDC 10/18, Richard Horner 11/15)

Response - Commenters are correct as far as a specific requirement for the on site retention of sediment and other construction pollutants residues", however, in addition to the Section VI.1, and 2, that the permittees maintain legal authority to control contributions of pollutants to the MS4 and shall take appropriate enforcement actions against violators of their water quality ordinances, under Section VI.6.i, Legal Authority/ Enforcement, the permittees are required to report on the effectiveness of their enforcement of water quality ordinances prohibiting the discharge of "… debris, sediment, etc." and Section VIII.3., Municipal Inspections of Construction Sites requires regular inspections to insure sufficiency, proper operation and proper maintenance of sediment and erosion control BMPs. The Regional Board will immediately proceed to an implementation of the construction activities permits for sites between 1 and 5 acres upon direction from the State Board that this is this approach should be implemented on a statewide basis.

114. Comment - The proposed permit defines new development as those projects for which tract maps have not been approved by September 26, 2001. This limitation is arbitrary . A trigger related to the actual start of construction would be more appropriate, as is the case in the San Diego County Permit. (NRDC 10/18, Richard R. Horner 10/19)

Response - It is correct that it is arbitrary to chose tract maps approved by September 26, 2001 as a definition of new developments. We believe that it is appropriate to set a clearly defined line for clarity of the process, and this is what staff proposes for the Board's consideration. However, we don't agree that the projects about to start construction on the date of adoption of the permit should have to be re-designed at that late date.

115. Comment - The proposed permit does not contain an express requirement to assure that flow regimes are maintained at pre-development levels after development is complete as is found in the Los Angeles permit. (NRDC 10/18)

Response - Correct. Also, see our response to Comment 113.

116. Comment - The SUSMP/WQMP program is not as broad as that contained in the San Diego County permit, including requirements for roadways. (NRDC 10/18)

Response - With respect to the need to meet all of the requirements of neighboring counties, it is not a requirement of the storm water program that all jurisdictions must do everything that is done by all of the neighboring jurisdictions. Each jurisdiction may choose to implement the program in a way most appropriate for them, as long as the requirements of the permit are met.

117. Comment - Section VII, Illegal & Illicit Connections does not contain any overarching performance standard directing specific, affirmative actions to eliminate illegal and illicit connections. Further the proposed permit does not contain any program to catalogue and update both permitted and non-permitted connections to the MS4 system, a step that is a predicate to effective management of the system. (NRDC 10/18)

Response - It is the position of the SARWQCB that the Tenative Order in its current state represents a well defined performance standard, which directs specific, affirmative actions to eliminate illegal connections to the MS4. The Tentative Order states: If routine inspections or dry weather monitoring indicate any illegal connections, they shall be investigated and eliminated or permitted within 120 days of discovery and identification. All reports of spills, leaks, and/or illegal dumping shall be promptly investigated and, where appropriate, reported to the Executive Officer within 24 hours (those incidents which may pose an immediate threat to human health or the environment; (e.g., sewage spills that could impact water contact recreation, an oil spill that could impact wildlife, a hazardous substance spill where residents are evacuated, etc.) by phone or e-mail, with a written report within 5 days. At a minimum, all sewage spills above 1,000 gallons and all reportable quantities of hazardous waste spills as per 40CFR 117 and 302 shall be reported within 24 hours and all other spill incidents shall be included in the annual report. The permittees may propose a reporting program, including reportable incidents and quantities, jointly with other agencies such as the County Health Care Agency for approval by the Executive Officer. As to cataloging permitted and unpermitted connections to the MS4, staff agrees that this would be a useful tool in the effective management of the permittee's system and will work with them to include this information in their Monitoring and Reporting Program update in 2003.

118. Comment - The proposed permit regulates municipal activities through an inadequate, idiosyncratic approach. The standard of performance should reiterate that permittees must prevent facilities from causing or contributing to a nuisance or exceedence of a water quality standard. Further, there should be more specificity in the requirements of the program and those requirements should, at a minimum, meet the requirements of neighboring counties. (NRDC 10/18)

Response – The adequacy of the Environmental Performance Reporting approach taken by the permittees, with respect to their own facilities will be investigated through the upcoming site audits of the permittees by Regional Board staff. Any deficiencies noted will be addressed immediately and if necessary, in the next MS4 permit.

The requirement that municipal facilities and activities not cause or contribute to a nuisance or exceedence of a water quality standard are listed in Sections III, Discharge Limitations/Prohibitions and IV, Receiving Water Limitations. Reiteration is not necessary.

With respect to the need to meet all of the requirements of neighboring counties, it is not a requirement of the storm water program that all jurisdictions must do everything that is done by all of the neighboring jurisdictions. Each jurisdiction may choose to implement the program in a way most appropriate for them, as long as the requirements of the permit are met.

119. Comment - At a minimum, the proposed permit should be clarified to state that the DAMP constitutes a baseline program, but not one that comports with the maximum extent practicable standard or the requirement that discharges not cause or contribute to an exceedence of water quality standards. (NRDC 10/18)

Response - The DAMP, when taken in the context of all of the additional activities that must be undertaken to comply with the subject permit, forms a solid basis for program compliance. A review of the draft permit will reveal that there are a number of activities that must be completed, in addition to those specified in the DAMP, for adequate performance under this Order.

120. Comment - Staff stated at the September 26, 2001 Public Workshop, that Section XVI, Sub-Watersheds and TMDL Implementation, would be modified to delete all references to the Maximum Extent Practicable standard. Section 402(p) of the Clean Water Act and its implementing regulations make clear, the MEP standard applies to all substantive permit provisions aimed at controlling the discharge of pollutants from an MS4 into a water of the U.S. (County of Orange 10/19, Santa Ana 10/19, Garden Grove 11/19, Tustin 11/19)

Response - We believe that it is clear that there are two separate levels of compliance with this Order. One is the MEP standard for compliance with storm water program requirements, other than where impaired water bodies and TMDLs are pertinent. However, wherever we have TMDLs in place, there must be strict compliance with those TMDL implementation plans. We believe that the TMDL implementation requirements trump the MEP standards. Both approaches are found in the federal regulations, and an approach that relies on a less aggressive iterative process cannot be used where TMDL implementation plans require a more aggressive level of effort.

121. Comment - The Order should clarify that the iterative BMP process applies to the discharge prohibitions and receiving water limitations in Sections III and IV. (County of Orange 10/19, Santa Ana 10/19, Richards)

Response - Section IV.4 of the proposed permit describes the iterative BMP process and states that permittees shall comply with Sections III.2 and IV of the proposed permit by complying with the iterative BMP process.

122. Comment - Regional Board staff have not provided any legal authority for the Order's detailed criteria for the inspection of all industrial, commercial and construction sites within the Permittees jurisdiction. Further, by imposing detailed requirements regarding which sites must be inspected and when, the permittees are not being given the flexibility necessary to determine how to allocate resources to best achieve water quality results. (County of Orange 10/19, Santa Ana 10/19, Richards, Garden Grove 11/19, Tustin 11/.19)

Response - The federal regulations (40 CFR 122.26 (d)(2)(iv)) require the municipalities to monitor and control pollutants from industrial and construction sites. Some of the industrial and construction sites are also regulated under the State's General Permits. The requirements in the proposed order are not intended to delegate any of the State's responsibilities under these General Permits. The municipalities must ensure that the industrial and construction sites are in compliance with their local ordinances. To avoid duplicative inspections, Regional Board staff will maintain an up-to-date database of its inspections on its website and work cooperatively with the local municipalities with

enforcement actions and other activities related to facilities regulated under the State's General Permits.

123. Comment - Although the Permittees may have a role in regulating industrial and construction sites, the permit language should be modified to delete responsibilities that are duplicative of the Regional Board's responsibilities under the Clean Water Act or are more extensive than those mandated under the Clean Water Act. (County of Orange 10/19, Santa Ana 10/19, Richards)

Response - We disagree. It is clear under the federal program that the responsibilities are to be jointly shared. The permittees make land use decisions. It would be inappropriate to think that the Regional Board must then address whatever storm water consequences arise from local land use development decisions. Joint responsibilities with the permittees will help keep the permittees aware that water quality consequences from their land use decisions.

124. Comment - Under the draft permit, a certain percentage of all construction, commercial and industrial sites are required to be 'high' priority. The inspection frequency for high priority construction and industrial sites are mandated whether these sites are actually contributing to water quality impairment. The Permittees will be required to expend resources inspecting sites that may not be contributing to water quality impairment at all and therefore the inspection program will not necessarily result in an improvement to water quality. (County of Orange 10/19, Richards)

Response - The Federal NPDES regulations clearly place an emphasis on the prioritization of sites of various land uses. The Tentative Order's requirements regarding site prioritization are more detailed than those in the Federal NPDES regulations, and the SARWQCB has increased the detail of the site prioritization requirements under Clean Water Act section 402(p)(3)(b)(iii), which states that a storm water program "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." This increased detail is necessary due to the continued degradation of the region's receiving waters caused by urban runoff. In some cases, the SARWQCB has identified high priority areas and activities based on USEPA guidance and experience with enforcement. Threat to Water Quality Prioritization allows the permittees to rate which site (construction, municipal, industrial, residential) will receive more of their oversight resources due to the site's ability to cause an greater negative impact to the receiving water quality in the event of a discharge. This inventory will help the Copermittee determine which sites are high priority and it will also be an important tool in watershed planning and management.

125. Comment - In the 2000 DAMP, the Permittees committed to an estimated $2.5 million in additional costs (beyond current expenditures) for inspection, monitoring and other programs. The draft Order would cost the Permittees an additional $14.5 million, or $17 million beyond what the Permittees committed to in the 2000 DAMP. Without a clear correlation between the additional costs and an improvement in water quality, the Permittees should not be required to

implement the inspection requirements in the draft Order. (County of Orange 10/19, Richards)

Response - The public adoption process for the Tentative Order enables to the SARWQCB to consider all potential impacts, both beneficial and detrimental, consistent with the public interest. The regional board is not required to undertake a formal Cost/Benefit Analysis, or other comprehensive economic analysis for the issuance of waste discharge requirements. While regional boards are required to consider economic factors in the development of basin plans (W.C. 13241), regional boards are not specifically required to undertake Cost/Benefit Analysis. Neither do federal regulations compel reliance on any particular form of economic analysis in the implementation of requirements based on the MEP performance standard; the admonition quoted from 64 Fed. Reg. 68722 & 68732 calls for flexible interpretation of MEP based on site-specific characteristics and "cost considerations as well as water quality effects…." Thus, while the regional board is advised to consider costs as a factor in determining the reasonableness or practicability of requirements, there is no state or federal mandate for a more formal economic analysis involving the development of Cost/Benefit or Cost-Effectiveness relationships. The SARWQCB considers factors that balance environmental protection with job creation, housing construction and affordability, and maintain a healthy economy during the process of adoption of the Tentative Order. It is the responsibility of the SARWQCB to protect the beneficial uses of receiving waters within the Santa Ana Region through the implementation and enforcement of waste discharge requirements and permits while considering the costs required to protect or restore those waters. It is the responsibility of the Copermittees, however, to secure the resources and implement and enforce the programs necessary to meet the requirements of the Tentative Order.

The SARWQCB has considered the costs associated with implementation of requirements for discharges to MS4 as well as the costs incurred as a result of exceedances of receiving water quality objectives associated with discharges from MS4. While there will be, undoubtedly, increased costs to municipalities to implement requirements of the Tentative Order, the increased burden associated with these requirements is not unreasonable in view of the following factors: municipalities can pass costs for planning and permitting on to permit applicants; municipalities can impose fees on persons who use MS4 infrastructure or require services from the municipality; municipalities can incorporate pollution prevention and control planning into existing planning activities; and municipalities can incorporate pollution and control implementation into existing regulatory functions. The Copermittees estimate that the Tentative Order will require an additional $17 million (over DAMP costs) per year to achieve with the Tentative Order. However, it is the responsibility of the Copermittees to develop and implement a balanced program in compliance with the Tentative Order that will minimize costs and maximize benefits. Finally, to the extent that the comment suggests that the Regional Board must conduct a cost-benefit analysis by demonstrating that the water quality benefits outweigh the economic costs, the SWRCB has rejected that argument. (SWRCB Order WQ 2000-11, pp 19-20.)

126. Comment - Article XIII B, section 6 of the California Constitution requires the State to give funding to reimburse local governments for the costs associated with a new program or higher level of service mandated by the Legislature or any state agency. The exception for mandates of the federal government applies only to cases where the State had no 'true choice' in the manner of implementation. (County of Orange 10/19)

Response - This argument has been made repeatedly and uniformly rejected by the State Board. The argument first appeared in the petition and lawsuit filed by the City of Long Beach contesting the validity of this Board's adoption of Order No. 96-054, the existing Municipal Storm Water Permit for Los Angeles County. Next, we saw the argument raised in connection with the SUSMPs Order adopted by the Board pursuant to the Municipal Storm Water Permit. The argument now appears in connection with this proposed permit. The commenter argues that the draft order shifts responsibility for carrying out governmental functions to local entities. One commenter, in particular, asserts that the proposed order would shift to the municipalities the burden of carrying out "a state mandate".

First, and most importantly, the draft permit does not purport to implement state law, but rather implements federal law as provided in the Clean Water Act and the municipal storm water regulations promulgated thereunder. Second, the State Board has already addressed the issue in its SUSMP Decision, Order WQ Order WQ 2000-11. There, the State Board indicated that its earlier decisions held that the constitutional provisions cited by the commenter have no application to the adoption of NPDES permits. The SWRCB cited *San Diego Unified Port District*, Order No. 90-3 for the proposition that the Constitutional mandate requirements do not apply to NPDES permits issued by Regional Board, in that the NPDES permit program is a federally-mandated program, rather than state-mandated. (Id, at page 14.) The Regional Board's issuance of the MS4 permit does not require that the State provide funding for its implementation.

127. Comment - In Finding No. 4, the word 'modified' is too broad and should be substituted with 'channelized'. Further, receiving waters for an MS4 are the waters of the U.S. that receive a discharge from an MS4 outfall, which is defined as a point source at the point where the MS4 discharges to waters of the U.S. Therefore a water cannot be both a receiving water and part of the MS4. (County of Orange 10/19, Lake Forest 10/19, Santa Ana 10/19)

Response - It is the position of the SARWQCB that the term 'modified' as used in Finding No. 4 is an appropriate expression. The commenter's suggested replacement term 'channelized', specifies a single type of modification to the MS4 and therefore could give rise to inaccurate implications. If certain sections of a natural waterbody (a water of the U.S.) was modified to carry flood flows, it may be considered by the entity who did the modification as an MS4; however, the waterbody still continues to be a water of the U.S.

128. Comment - Finding No. 5 states that storm water discharges from the MS4 are tributary to various water bodies in the region. This could be interpreted with other Order

provisions to indicate that receiving water limits extend to actual runoff coming from industrial, construction and other sites that drain into the MS4. (County of Orange 10/19, Santa Ana 10/19)

Response - Changes to the wording in the primary sentence in Finding No. 5 have been made. The sentence now reads (changes in italics): Storm water *outfalls* from the MS4 systems in Orange County enter *or are* tributary to, various water bodies of the Region.

129. Comment - Finding No. 12 suggests that the Permittees have carte blanche control over all aspects of urban development and should be revised to clarify the limits on the Permittees' land use authority. (County of Orange 10/19, Lake Forest 10/19, Santa Ana 10/19)

Response - Since the permittees permit, authorize, and realize benefits from urban development within their jurisdictions, the Tentative Order holds the permittees responsible for the short and long-term water quality consequences of their land use decisions. Municipalities retain land use authority for the purpose of realizing benefits, financial or otherwise, from decisions to urbanize. Furthermore, because water quality degradation often occurs as a result of the urbanization process, permittees must implement (or require others to implement) controls to reduce the flow and pollutants generated from each of the three major phases of urbanization that they authorize; namely the (1) land use planning, (2) construction; and (3) use or existing development phase.

130. Comment - Finding No. 37 requires "the implementation of control measures that are technically and economically feasible to protect beneficial uses and attain water quality objectives." It may not be possible to attain water quality objectives through the use of technically and economically feasible control measures and the finding should reflect that the permit only requires, at most, the implementation of technically and economically feasible control measures. (County of Orange 10/19, Santa Ana 10/19)

Response - A review of Finding 37 shows that , "…it is the Regional Board's intent that this order require the implementation of best management practices to reduce to the maximum extent practicable, the discharge of pollutants in storm water from the MS4s in order to support the attainment of water quality standards". Therefore, the comment, which refers to the Receiving Water language in Finding 37 is appropriate under this context. The iterative process envisioned under this order strives to achieve these goals in a manner that should always move towards the attainment of water quality objectives.

131. Comment - Finding No. 52 should be revised to reflect that where the Order goes beyond the requirements of the Clean Water Act, such as the BMP sizing criteria Section XII and the removal of the Maximum Extent Practicable standard from the TMDL requirements in Section XVI, the requirements of CEQA do apply. (County of Orange 10/19, Santa Ana 10/19)

Response - The issuance of the MS4 permit in its entirety is exempt from the documentary requirements of CEQA pursuant to Water Code Section 13389. Contrary to the comment, the provisions of this permit do not go beyond the requirements of

the CWA, Accordingly, as the State Board recently concluded, CEQA does not apply in the manner asserted. SWRCB Order WQ 2000-11.

132. Comment - In Sections III.1 and VII.1, the phrase "illegal/illicit discharges" should be changed to illicit discharges and illegal connections and should only require "effective" prohibition. Section III.2 should be deleted as it duplicates a similar provision in Section IV. Section III.4 should be revised to allow the Executive Officer to remove a category from the list of exempt categories of discharges only when the discharge is found to be a "significant" source of pollutants. (County of Orange 10/19, Santa Ana 10/19, Richards)

Response - The above changes have been made to the proposed permit.

133. Comment - Section VI.1, regarding legal authority to "control discharge of pollutants into their MS4" should be revised to be consistent with 40 CFR 122.26(d)(2)(i)(A-F). (County of Orange 10/19, Santa Ana 10/19)

Response - The above change has been made to the proposed permit.

134. Comment - It is unclear that there is a legal authority supporting the restaurant inspection program, but the County does not object to such a program. However, the permittees would like additional flexibility, in particular, the County and permittees wish to be able to designate the appropriate jurisdictional entity to perform the inspections and the inspection protocols. (County of Orange 10/19, Richards)

Response – It is understood that the County of Orange currently provides a countywide restaurant inspection program through its Health Care Agency. This agency assesses compliance with specific Health Code requirements by conducting inspections at each of these establishments on a routine basis. It is therefore the position of the SARWQCB that each establishment's storm water pollution prevention measures could be observed, as an addendum item to the food handlers' inspection, at the same time the facility is inspected by the Health Agency.

135. Comment - In Section VII.2, it appears that based on the criteria used to designate high, medium and low priority construction sites would result in most Orange County construction sites being ranked high. (County of Orange 10/19)

Response - The criteria used to designate high, medium and low priorities for construction sites, as well as, inspection frequency, have been modified in the proposed permit. However, it should be noted that construction sites are high-risk areas for pollutant discharges to storm water. By assessing information provided in the watershed based inventory of construction sites required (such as site topography and site proximity to receiving waters), sites can be prioritized by threat to water quality. Those sites that pose the greatest threat can then be targeted for inspection and monitoring. This will allow for inspection and monitoring resources to be most effective. Section VIII.2 of the Tentative Order details specific minimum criteria for construction sites within Orange County. These requirements were established in light of ecologically sensitive areas throughout much of the county. It is therefore understood that many of

the construction sites within the county's borders will be categorized as a 'high priority' and should be managed and inspected accordingly.

136. Comment - Section IX.1 requires a complete inventory of industrial/commercial facilities, which may be impossible. At the very least, the inventory should be based on business permits or other authorization and have the potential to discharge pollutants to the MS4. Further, the requirement that 30% of the listed facilities be ranked high is arbitrary. (County of Orange 10/19, Santa Ana 10/19)

Response - The section on municipal inspections of industrial/commercial facilities has been split into two sections, IX, Municipal Inspections of Industrial Facilities and X, Municipal Inspections of Commercial Facilities. The requirements and implementation schedule have also been modified. The beginning of the industrial inspection program will be limited to those facilities that have business permits or other authorization by permittees, that have the potential to discharge pollutants to the MS4. By July 1, 2005, the remaining industrial facilities (those without business permits or other local authorizations) within a jurisdiction must be identified, prioritized and inspected. Section X, Municipal Inspections of Commercial Facilities, has been incorporated based, to a great extent, on strikeout language provided by the County of Orange and includes 11 major categories of facilities to be inventoried, prioritized and inspected. The 30% requirement for 'high priority' facilities has been deleted form the proposed permit.

137. Comment - The industrial and construction inspections programs both require permittees to recover non-implementation cost savings from violators. This should be left as an option to the permittees. (County of Orange 10/19, Santa Ana 10/19)

Response - This requirement has been deleted from the proposed permit.

138. Comment - The requirement that SUSMPs be implemented in new development until their revised WQMPs are approved would have the permittees shift the focus of the DAMP until it looks more like a SUSMP. (County of Orange 10/19, Santa Ana 10/19, Richards)

Response - This requirement has been deleted from the proposed permit.

139. Comment - In many cases, development rights and conditions of approvals for a project are established before the governing body has approved the tract map or the developer has started construction and the Permittees cannot legally impose new BMP requirements. The footnote identifying new construction and significant redevelopment should be revised to address this issue. (County of Orange 10/19, Santa Ana 10/19)

Response - The footnote defining new development has been modified to exclude projects that are proceeding under a common scheme of development that was the subject of a tentative tract or parcel map approval that occurred prior to July1, 2003.

140. Comment - Sections XII.A.2 and XII.A.3 are superceded by the requirements for a municipal inspection program for industrial, commercial and construction sites and should be deleted. (County of Orange 10/19, Santa Ana 10/19)

Response - These sections have been deleted from the proposed permit.

141. Comment - The new monitoring program would require the permittees to revise their current monitoring program prior to the end of the planned 5-year period. Further, while the permit should provide guidance as to what type of monitoring elements should be incorporated into the revised program, but not so prescriptive as to dictate frequencies and locations. (County of Orange 10/19)

Response – The revised Tentative Order requires permittees to revise their monitoring programs by July 1, 2003. It is the position of the SARWQCB that the Tentative Order provides guidance as to what type of monitoring elements should be implemented in the revised monitoring programs. Specific sampling locations are dictated based upon historic evidence that has raised significant concern of pollutant impacts in and around these sampling points.

142. Comment - In Section XIX.1, Provisions, the proposed permit does not accurately reference the maximum extent practicable standard. The first paragraph should include the following:" The purpose of this Order is to require the implementation of BMPs to reduce, to the maximum extent practicable, the discharge of pollutants in storm water from MS4s in order to support reasonable further progress towards attainment of water quality objectives." (County of Orange 10/19, Richards)

Response - This section of the proposed permit has been modified.

143. Comment - The commenter wants to make sure that the proposed solutions for storm water do not cause a groundwater quality problem. Structural infiltration BMPs should have minimum setbacks from drinking water wells, include protections to prevent illegal dumping and a monitoring system to assess impacts on groundwater quality. The permit requires that BMPs not cause or contribute to an exceedance of groundwater quality objectives, but should be expanded beyond the six inorganic constituents, to include the hundreds of organic and microbiological constituents which may be in surface water. (OCWD)

Response - Focusing large amounts of water into a small area has the potential to impact groundwater and the restrictions for structural BMPs used to infiltrate runoff were based on USEPA guidance. The Tentative Order allows the Copermittees the discretion to develop alternatives to these restrictions as the Copermittees find appropriate. However, if the Copermittees find that use of a infiltration structural BMP will cause an exceedence of groundwater quality objectives, then the BMP should not be used.

144. Comment - The commenter suggests only including those provisions in the permit for which there is broad support, establishing advisory bodies to evaluate the remaining provisions and hold focused hearings in addition to public workshops. (Costa Mesa)

Response - Comment noted. The permit, its Fact Sheet, and these responses to comments demonstrate the need to proceed with the proposed order.

145. Comment - Section IV.2 prohibits discharges which cause or contribute to a nuisance, without a definition of 'nuisance'. (Irvine 10/19)

Response - A reference to Section 13050 of the Water Code, which defines 'nuisance', has been added to Section IV.2 of the proposed permit.

146. Comment - The permittees should be given the opportunity to evaluate and select the most effective BMPs for various types of developments as an alternative, prior to implementation of SUSMPs. (Irvine 10/19)

Response - The SUSMP requirements apply only to discretionary and non-discretionary projects falling under the priority project categories after the adoption of the Tentative Order. The Copermittees are required to use the 18-month SUSMP implementation period to ensure that projects undergoing approval processes include application of the SUSMP requirements

147. Comment - Permit language regarding fire fighting flows should mirror the language in the San Diego Region's permit. (Newport Beach)

Response - Sections III.3 and Section XIX have been modified to clarify BMP implementation requirements for emergency and non-emergency fire fighting flows.

148. Comment - The addition of the '10 million impressions per year' is an important addition to the public education section, giving a specific and measurable goal. Commenter suggests that there be requirements that any public education component result in measurable increases in public knowledge or behavior changes. (Newport Beach)

Response - Comment noted and the requirement that public education results in measurable increases in public knowledge or behavior has been added to the Tentative Order.

149. Comment - While the inspection programs for industrial, commercial and construction activities may be costly, the City of Newport Beach supports them. The current county program which only investigates/inspects areas based on a known water quality problem may miss areas that generate impairments. Newport Beach)

Response - Comment noted.

150. Comment - The commenter recommends that Section IX, Municipal Inspections of Industrial/Commercial Facilities be broken into two sections. (Santa Ana 10/19)

Response – The Tentative Order has been modified, resulting in two separate sections for municipal inspections of industrial and commercial facilities.

151. Comment - Regarding grease management equipment, in addition to grease traps, there are grease interceptors and other devices that should be included in Section IV.7. (IRWD 10/19)

Response - The Tentative Order has been expanded to include other types of grease interceptors.

152. Comment - In conjunction with the County of Orange and the cities within the San Diego Creek watershed, IRWD is developing a system of constructed wetlands designed to remove various pollutants from dry weather flows. The wetlands should assist in reduction of sediment, pathogens, and toxics, but other measures will be needed to control pollutant sources. (IRWD 10/19)

Response - Regional Board staff will work with the commenter and the permittees in the San Diego Creek watershed on the development and implementation of regional solutions. However it is important to note that the commenter agrees that additional measures will be needed to control pollutant sources.

153. Comment - It is important that nothing in the permit reasonably precludes constructed wetlands from being constructed, operated and maintained. Based on commenters interpretation of the 09/12 draft permit, nothing has been included that would significantly impede the construction or operation of the wetlands as currently planned. (IRWD 10/19)

Response - Comment noted.

154. Comment - The permit as written will lead to a continued degradation and lessened water quality for a number of surface waters within the permitted area. (Coastkeeper)

Response - This is a very non-specific comment, but we disagree with its premise. We believe that implementation of the November 5th draft order will lead to improved water quality with the implementation of improved BMPs and the other program requirements.

155. Comment - Like the issues of aged sewage infrastructure and sewage treatment levels, mitigation of urban runoff carries expensive solutions. There really is no choice, left to minimum requirements, minimum best management practices is what we will get in return. (Coastkeeper)

Response – Comment noted.

156. Comment - Even when considering all components that make up Orange County's stormwater program, commenter reaches the opinion that it is wholly inadequate to stem the diminishment of water quality and aquatic ecosystems associated with the growth of the county and fails to reach the level of adequate programs in place in the region. (Richard R. Horner 10/19)

Response - We disagree. Compliance with the storm water program contemplated by this order should result in the implementation and application of continuously more effective BMPs, and that, along with requirements for compliance with TMDLs should result in water quality improvements.

157. Comment - The draft permit has been developed without compliance with California's Administrative Procedure Act. (Richards)

Response - A comment asserts that the issuance of the MS4 permit constitutes a "regulation" and is subject to the processes set forth in the Administrative Procedures Act (Govt. Code, § 11340, et seq.). This is not the case. In adopting the Administrative Procedures Act (APA), the Legislature specifically exempted the adoption of permits by the State Board and regional boards. Government Code section 11352 states very plainly: "The following actions are not subject to this chapter: … (b) issuance, denial, or revocation of waste discharge requirements and permits pursuant to sections 13263 and 13377 of the Water Code . . ." The adoption of the proposed NPDES permit is an action pursuant to Water Code section 13377. Accordingly, the issuance of the proposed MS4 permit is not subject to the APA processes for rulemaking.

Contrary to the argument that the permit is a "rule of general application," in adopting the exception set forth in Government Code section 11352, the Legislature recognized the unique nature of regional board waste discharge requirements and permits. The adoption of waste discharge requirements and permits constitutes an action that applies solely to the named dischargers who are subject to the individual permit. Moreover, the process that the boards follow to consider adopting a permit complies with legal notice, comment, and response requirements. Given the high volume of NPDES permits and Waste discharge Requirements, and the comparatively cumbersome process under the APA's full rulemaking process (which can take a year or longer), it is easy to see that the Legislature intended to apply a more streamlined process to the adoption of permits and WDRs, that still provides full due process protections to all those concerned.

Finally, the State Board has previously dispensed with this same comment in its SUSMP Order (Order WQ 2000-11). There, it determined that since the Regional Board tailored the permit requirements to the needs of the Los Angeles County; only the named permittees are governed by the permit; and they as well as any other interested persons have had ample opportunity to comment on the permit, that the permit issuance was exempt from the APA, pursuant to Government Code section 11352.

158. Comment - The draft permit fails to provide a "Safe Harbor" provision for the permittees. (Richards)

Response - Provisions such as those suggested by the Commentor have previously been determined by the SWRCB to be acceptable. (See Order WQ 98-01) However, they were never, as the Commentor concedes, mandatory or required. In fact, in WQ 99-05, which amended WQ 98-01, the SWRCB prescribed the precise language that it directed be used by Regional Boards in the Receiving Water Limitations provision. Nowhere in that language does the "safe harbor" language appear. The Comment is a reiteration of an issue raised several times before to the regional boards and the SWRCB in several years of development of appropriate municipal stormwater permits by the regional boards and the SWRCB. The debate over the issue has included comment by

environmental groups, municipal dischargers, industry representatives and the U.S. EPA.

The disadvantage of such provisions is that they have the effect of restricting the Regional Board's proper exercise of enforcement authority. The SWRCB's decision not to include the suggested language in its Order WQ 99-5 represents a deliberate effort to provide explicit guidance regarding this issue. Very recently, in its Order WQ 2001-15, regarding review of the San Diego's Regional Board's MS4 permit for part of Orange County, the SWRCB signaled yet again that the precise language prescribed in Order WQ 99-05 – no more and no less – is that which should be included in MS4 permit Receiving Water Language. There, following extensive analysis relating to the continued appropriateness of the language set forth in 99-05, the SWRCB, although it had a clear opportunity to do so, made no changes to the language such as that proposed by the commenter. It is also important to point out that the MS4 permit for part of Orange County adopted by the San Diego Regional Board does not contain such a provision. Nor does the current draft of the MS4 permit for Los Angeles County being considered by the Los Angeles Regional Board.

159. Comment - The definitions for "Best Management Practices", "Maximum Extent Practicable" and "Illegal/Illicit Discharge" should mirror those in the proposed Los Angeles County Permit. (Richards)

Response - The definitions for the aforementioned terms are based on or the same as those in the previous Orange County MS4 permit. Furthermore, the definitions found in the Los Angeles County MS4 permit are still in the draft stage & could yet be changed.

160. Comment - Change "de minimis" to "De Minimis." (Richards)

Response - The Tentative Order has been modified in response to the comment.

161. Comment - The list of exempted non-storm water discharges (Section III.4) should include sidewalk rinsing, dewatering of lakes and decorative fountains, and "discharges originating from federal, state or other facilities which the Permittee does not have the jurisdiction to regulate." (Richards)

Response - The discharge of rinsate from the cleaning of sidewalks associated with municipal, commercial and industrial areas, as well as, food service areas is strictly prohibited by the proposed permit (Section VI.6.e). Because of chemicals used to minimize biological activity in fountains and the high nutrient and pathogen concentrations in urban lakes, it is unlikely that these waters would be sufficiently low in pollutants to allow discharge to the local storm drain system. Finally, discharges from federal, state or other facilities which the permittees do not have jurisdiction to regulate are already exempted from the proposed permit in Finding16.

162. Comment - The terms "Receiving Water Limitation", "hazardous materials", "toxic materials" and "New Development" are not defined within the proposed permit. (Richards)

Response – "New Development" is defined in Footnote 4. "Hazardous Materials", "Toxic Materials" and "Receiving Water Limitations" are commonly used terms and were not defined to avoid lengthy glossary of terms. However, those definitions are included in the revised draft.

163. Comment - Homeowners associations should not be required to capture, monitor and test all runoff from their property. (Stream House)

Response - In the case of existing developments, there is nothing in the proposed permit that will require homeowners associations to capture, monitor or treat runoff. For new developments, which meet the requirements in Section XII.B, on-site structural BMPs will be required, possibly in conjunction with regional BMPs. These on-site BMPs may capture runoff and will require regular maintenance. Maintenance responsibilities for the on-site BMPs will be set forth in agreements between the developer and the local municipality.

164. Comment - There is no legal authority for the Water Control Board to make it illegal for the Foothill Ranch Maintenance Corporation residents to hose down their hardscape from time to time. (Foothill Ranch)

Response - There is nothing in the proposed permit that would make it illegal for residents to hose down sidewalks and driveways provided that adequate BMPs, such as dry sweeping or the use of absorbents, has significantly reduced the load of pollutants (for example oil and grease, sediment or masonry materials) carried by the discharge.

165. Comment - The commenter disagrees with the statement in Section X, page 20, of the Fact Sheet to the effect that "The true magnitude of the urban runoff problem is still elusive and any reliable cost estimates for cleaning up urban runoff would be premature." The balancing required by CWA § 402 (p)(3)(B)(iii) and California Water Code § 13241 (c) and (d) clearly require the Regional Board to consider the "Cost of Storm Water Treatment got California Urbanized Areas" study. (Burke 11/6)

Response - In fact cost estimates for cleaning up urban runoff are premature. While the references provided by Burke, Williams and Sorensen, LLP for the Cities of Lake Forest, Los Alamitos and Stanton only address one possible solution, advanced treatment in Publicly Owned Treatment Works (POTWs) designed specifically for the treatment of storm water. However, the municipal storm water program is designed to achieve compliance through an iterative process of improvements in public education, source control BMPs, regional treatment solutions (constructed wetlands), and diversion of specific low flows, rather than the construction of massive treatment plants.

166. Comment - The commenter is concerned about the "lack of information which is provided to the Association to allow compliance with the Order." (Feldsott)

Response - Section XIII of the Tentative Order details the permittee's responsibilities for increased public education programming. Various elements of required programs are to be developed and implemented by set deadline dates. Through

these designated programs, the permittee will reach and educate the public and business communities to a level of comprehension, that all will be able to understand and comply with the water quality goals implied by the Tentative Order.

167. Comment - The commenter claims changes to Section IV, Receiving Water Limitations, including insertion of the qualifying phrase "maximum extent practicable" and deletion of the "or contribute to" portion of "cause or contribute to are illegal and that they should be excised and the previous language restored. (NRDC 11/14)

Response - Section IV, Receiving Water Limitations has been modified to meet the requirements of SWRCB WQ 99-05. The MEP phrase has been deleted and the "not cause 'or contribute to'" prohibition has been inserted.

168. Comment - The last version of the Proposed Permit put in place a SUSMP requirement. This version terminates that requirement. In this way, the Proposed Permit violates another precedential order of the SWRCB, Order No. 2000-11. (NRDC 11/14)

Response - The requirement remains that Water Quality Management Plan (WQMP) requirements, equal to or more protective than the SUSMP programs in the Los Angeles County Permit and the San Diego County Permit, be implemented. A deadline of October 1, 2003 has been established for the approval of the WQMP by the Executive Officer or a SUSMP program will be the required default. As to the statement that the proposed permit violated SWRCB WQ 2000-11, as was noted in the response to Comment 49, WQ 2000-11 stated that SUSMPs did not violate the MEP standard and that they were one way to meet that standard, but not the only way.

169. Comment - The commenter notes that when the SUSMP program begins, it only applies to projects in tracts that were approved no earlier than mid-2003. This opens up a massive loophole. (NRDC 11/14)

Response - See Comment 114.

170. Comment - Section VI, Legal Authority: the requirement that the permittees maintain and enforce adequate legal authority has been delimited so that this requirement applies to industrial discharges. This facially violates 40 CFR Section 122.26. (NRDC 11/14)

Response - Section VI, Legal Authority/Enforcement has modified to delete the limiting statement "… associated with industrial discharges."

171. Comment - Section IX, Municipal Inspections of Industrial Facilities: this draft deletes minimum inspection requirements and conditions the applicability of the requirement by connecting the provision to the issuance of permits by the local government. (NRDC 11/14)

Response - While the requirement that a minimum of 30% of industrial sites be designated high or medium priority has been deleted, the prioritization factors remain and

Regional Board staff will closely monitor the prioritization and inspection of industrial facilities by the permittees. As to the conditions of the applicability of the prioritization/inspection requirements, the limitation to sites with business licenses or other local authorizations is only an initial condition. By July 1, 2005, the remainder of industrial sites within the permittees jurisdiction must be identified, prioritized and inspected.

172. Comment - Section X, Municipal Inspections of Commercial Facilities: all prioritization requirements have been removed. (NRDC 11/14)

Response – While there are no minimum number or percentage of commercial entities that must be designated high or medium priority, there are prioritization factors such as type and magnitude of operation and history of unauthorized non-storm water discharges, that will allow Regional Board staff to closely monitor the prioritization and inspection of commercial facilities by the permittees.

173. Comment - Most of Section XI has been deleted. In what sense is this deletion consistent with the MEP standard and need to address known sources of pollutants in the County? (NRDC 11/14)

Response - The deletion of requirements on sewage spills and infiltration of sanitary sewer line leakage into the MS4 from this permit is being done in conjunction with the implementation of requirements to cover these issues in Sanitary Sewer Overflow (SSO) General Waste Discharge Requirements to be issued to the sanitation districts in the Region.

174. Comment - Section XII: This section suggests, but does not require, that water quality problems be considered during the CEQA process (using the word, "should"). (NRDC 11/14)

Response – Subsection XII.A.3, New Development (Including Significant Re-Development), has been modified to require the review of permittee planning procedures and CEQA document preparation processes to insure that the urban runoff-related issues are properly considered and addressed (a list of 6 potential impacts are listed in the permit). Then based on the results of that review, the planning procedures and CEQA document preparation process should be revised as necessary. Finally, a report that includes the findings of the review and the actions taken is to be submitted to the Regional Board.

175. Comment - Section XII (B) (SUSMP): Retail Gasoline Outlets have been removed as a primary category notwithstanding information developed by the Los Angeles Regional Board regarding pollutants that flow from so-called RGOs. This is not consistent with MEP. (NRDC 11/14)

Response – It is understood that the Los Angeles Regional Board (in conjunction with the San Diego Regional Board) released a document on June 29, 2001 to support the inclusion of Retail Gasoline Outlets (RGOs) as one of the SUSMP New Development/Significant Re-Development categories. It is suggested by the commenter that non-inclusion of RGOs as a SUSMP or WQMP category would be in conflict with the MEP standard. First, this order is in conformance with the State Board precedential orders concerning RGOs. Second, it is not

clear how the selection of a SUSMP category by one or more permitting agency would require that all future permits include that specific category to meet MEP. The definition of MEP is not simply selecting the most stringent program from every existing permit and combining them into one permit and calling it the MEP standard that must be met by all other municipalities.

176. Comment - Throughout the permit, well over a dozen changes to deadlines have been made, most often relaxing these requirements. This is not consistent with the MEP standard. (NRDC 11/14, Richard Horner 11/15)

Response - We absolutely disagree with this comment. To suggest that the very difficult deadlines contained within the proposed order are inconsistent with MEP is to re-define MEP in a manner in which "practicable" is replaced by "possible". The deadlines in the November 5th draft were developed in consideration of budget cycles and the very demanding requirements of the draft order. We suppose that it would be strictly possible to implement shorter deadlines, but certainly the new deadlines, while still very tough to meet, will allow for a more reasoned and "practicable" implementation approach.

177. Comment - There is no mandate to mimic any aspect of pre-development hydrology. Redevelopment is not defined. There is only vague provision to "…ensure proper maintenance…" of storm water facilities. (Richard Horner 11/15)

Response - Commenter is correct that there is no "mandate to mimic … pre-development hydrology. However, Section XII.A.4, New Development (Including Significant Re-Development) requires that permittees shall review their General Plan and related documents to insure that policies, such as, minimizing changes in hydrology and ensuring that post-development runoff rates and velocities from a site have no significant adverse impact on downstream erosion and stream habitat. Further, in Section XII.B.2, Water Quality Management Plan (WQMP) For Urban Runoff (For New Development/ Significant Redevelopment, it states that the goal of the WQMP is to develop and implement practicable programs and policies to minimize the effects of urbanization on site hydrology and urban runoff flow rates or velocities.

178. Comment - The permit is vague in regards to existing residential areas dealing only very briefly with maintaining existing litter collection and reporting and little else. (Richard Horner 11/15)

Response - While there isn't a specific section devoted strictly to existing residential areas, there are requirements in Sections VI.6, VIII, X and primarily in XIII (Public Education).

179. Comment - There are no standards for "model maintenance procedures." and the language does not specify that this maintenance necessarily means cleaning out accumulated material in drain inlets, catch basins, and other portions of drainage systems. (Richard Horner 11/15)

Response - The adequacy of the proposed "model maintenance procedures" will be evaluated by Regional Board staff. As to cleaning of catch basins and drainage facilities, Sections XIV.3 and XIV.6 have been modified to include cleaning.

180. Comment - The permit only specifies that permittees must get the necessary legal authority to prohibit sewage discharges to storm sewers by 7/1/03. (Richard Horner 11/15)

Response - Permittees are already required to have the necessary legal authority to prohibit sewage discharges to the storm sewers. What Section VI.6.a is requiring, is a report on the effectiveness of these ordinances in prohibiting these illicit discharges.

181. Comment - The Los Angeles County Permit's BMPs specify care in performing routine maintenance on managing wastes, street sweeping, etc. The permit virtually ignores this infrastructure element, widespread in scope and an important pollutant source, calling only for development of "model maintenance procedures." (Richard Horner 11/15)

Response - It is understood that the proposed permit is not highly prescriptive in the area of municipal activities. As noted by the commenter, the permittees have committed to the development and implementation of model maintenance procedures at the beginning of this permit cycle. The adequacy of the proposed "model maintenance procedures" will be evaluated by Regional Board staff.

182. Comment - There is no explicit mention of maintenance yards and self-audits appear to be the predicate of the program. (Richard Horner 11/15)

Response - Maintenance yards are included in the permittees 'self-audit' or Environmental Performance Reporting. As noted previously, model maintenance procedures will be developed and implemented at the beginning of this permit cycle. The adequacy of the proposed "model maintenance procedures" will be evaluated by Regional Board staff at the time of development and through Regional Board inspections of permittee facilities.

183. Comment - Public education goals are weak and vague, and outreach methods are described in a fashion too general to set a direction. (Richard Horner 11/15)

Response - Finding #28 which reads … a successful storm water management plan should include the participation and cooperation of the public, businesses, the permittees and the regulators. The DAMP has a strong emphasis on public education. This finding includes the existing DAMP as an integral part of the permittee's public education program. Additionally, Section XIII of the Tentative Order illustrates specific management and implementation goals with corresponding deadline dates for each goal to be reached.

184. Comment - Imposing more inspections on an existing project is neither warranted nor practical. It is strongly recommended that the requirement for this inventory be limited to sites for which a Building or Grading permit has been issued after the effective date of the Draft Order. (Tustin 11/19)

Response - The point of this provision in the Tentative Order is not to place an undue burden on the contractor, but rather insure that the contractor is in compliance with storm water regulations. The commenter states that "This will be a new

requirement the contractor is unaware of and it will take resources away from other projects that need attention due to non-compliance." The contractor should be beyond the awareness stage of the learning curve and well into the implementation stage of the BMP process. If the contractor is unaware of these requirements, appropriate attention is well warranted to insure the contractor is made aware of these new requirements as part of the compliance measure. This provision in the Tentative Order is not designed to increase the number of inspections. It is designed to increase water quality through compliance. If the contractor is unaware of these new requirements as the commenter implied, the imposing of more inspections on an existing project is therefore both warranted and practical.

185. Comment - The commenter requests that the Regional Board incorporate the language from the earlier orders into Section XVI or, alternatively, provide a linkage within Sections IV.3 and 4 so as to bring Section XVI within the scope of the iterative process used for reviewing and revising BMPs. (County of Orange 11/19)

Response - The TMDLs referenced in Section XVI, Sub-Watersheds and TMDL Implementation, have had implementation plans established outside of the MS4 program and therefore are not subject to the "maximum extent practicable" standard found in Sections IV.3 and 4, Receiving Water Limitations. Further, while an iterative BMP process may be utilized to determine the most cost-effective BMP combination necessary to meet the waste load allocations presented in Section XVI, compliance with those allocations must be achieved no later than the date identified in Section XVI.

186. Comment - Section VI.7.a-d, we do not agree that under the storm water program the Permittees should be responsible for the inspection of grease traps/interceptors (Section VI.7.e). These devices are more appropriately inspected by the local wastewater agency. (County of Orange 11/19)

Response - This letter apparently notes a change for the County from their October 19, 2001 letter where they recommended allowing the County and cities to designate the appropriate jurisdictional entity to perform the inspections.

Language in the Tentative Order is crafted to allow the permittees to provide a program that protects the MS4 from contaminants produced by the restaurant industry. Specific areas at these sites present potential threats to the water quality entering the MS4. These areas of targeted threats include, but may not be limited to, those listed in Section VI. 7.a-d. It is therefore the responsibility of the permittee to insure these areas are inspected accordingly.

It is understood that the County of Orange currently provides a countywide restaurant inspection program through its Health Care agency. This agency assesses compliance with specific Health Code requirements by conducting inspections at each of these establishments on a routine basis. It is therefore the position of the SARWQCB that each establishment's storm water pollution prevention measures could be observed, as an addendum item to the food handlers' inspection, at the same time the facility is inspected by the Health Agency. The SARWQCB does not concur with the commenters opinion that

these areas should be the responsibility of the local wastewater agency. The local wastewater agency has the responsibility of maintaining water quality issues as they pertain to the sanitary sewer system, not the MS4.

187. Comment - The commenter recommends deleting the phrase "a more aggressive program," since this inappropriately assumes that the current or future program modifications would be inadequate. (County of Orange 11/19)

Response - The initial requirement in the proposed permit is based on a commitment made by the permittees in the 2000 DAMP. That requirement of inspecting, cleaning and maintaining 80% of catch basins on an annual basis appears to be a one-size-fits-all approach. There are certainly catch basins in highly urbanized areas and areas downstream of active construction sites that warrant a higher frequency of cleaning than annually. As noted before, the Los Angeles County draft MS4 permit requires permittees to prioritize catch basin locations and clean high priority catch basins on a monthly basis during the wet season and annual cleaning of all low priority catch basins. This approach is certainly more 'aggressive' than an annual cleaning of only 80% of all catch basins.

188. Comment - The commenter would like further clarification on the intent, coverage, and intended use of the monitoring program. (County of Orange 11/19)

Response – Intent

Intent, or, objectives, of the OC Monitoring Program is outlined in the monitoring section of the MS4 permit and is basically no different than that identified within the 1999 Final Monitoring Program. Taken along with objectives from previous monitoring efforts within the county, the intent is summarized as follows:

To assess the impact of storm water (and non-storm water) on attainment of water quality objectives and beneficial uses of receiving waters: assess long-term trends, identify pollutants of concern, and estimate pollutant loading to receiving waters and from specific land uses; identify sources of excessive contamination within Orange County; and address specific impacts to areas of special concern (e.g., 303d listed waterbodies, estuaries, wetlands, areas of special biological significance).

To identify and prohibit illicit discharges.

To develop and support an effective municipal urban runoff and non-point source control program, and to evaluate the effectiveness of existing municipal storm water quality management programs.

It is anticipated that the most effective municipal storm water quality management program will involve cooperation and integration with outside research and monitoring efforts (e.g., SCCWRP, OC Health Care Agency, etc.).

Coverage

In the draft permit, specific monitoring requirements were identified which enlarge the overall scope of the existing program, and should enable a more

accurate assessment of biological integrity, community dynamics, and public health impacts. These requirements are logical and justified, and are consistent with requirements of neighboring coastal regions.

Intended Use
The intended use of monitoring data and assessments are implied within the objectives. The program provides the means to evaluate the effectiveness of the municipal storm water quality management program and best management practices. Monitoring information may be used in decision-making processes.

In summary, an effective monitoring program is described in Monitoring Southern California's Coastal Waters (1990): "…the committee recommends that a regional monitoring program be established that would address public health impacts, natural resources and nearshore habitat trends, non-point source and riverine contamination, and cumulative or area-wide impacts from all contaminant sources."

A regional program should involve participation by the public and scientific communities at local, state and federal levels and should include built-in mechanisms to communicate its conclusions to regulatory agencies and the public… It should also include review mechanisms and allow easy alteration or redirection of monitoring efforts, whenever justified by monitoring results or other information. Anticipated benefits from a regional program would include: greater cost efficiency through use of standardized sampling, analysis, data management, and coordination of effort; ability to address specific questions about environmental conditions and resources and to alter or redirect monitoring efforts as needed; and more effective use of monitoring information in decision making by ensuring better communication with and involvement by the public and scientific community.

Implementing a regional program will require coordination among local, state, and federal agencies and the integration of their regulatory, data and management needs. Only through an integrated system-wide approach can important environmental and human health objectives identified by society be successfully attained: ensuring that it is safe to swim in the ocean and eat local seafood, providing adequate protection for fisheries and other living resources, and safeguarding the health of the ecosystem.

189. Comment - Rather than prescribing detailed programs that may be redundant to other treatment, we recommend that the Permittees be given the ability to develop, and submit for RWQCB Executive Officer approval, comprehensive management plans that effectively address the characteristics and needs of these watersheds. (IRWD 11/19)

Response - The permittees had such an opportunity with the submittal of the Report of Waste Discharge (ROWD) in September 2000. At that time, the permittees reviewed their MS4 program, designed an update to the Drainage Area Management Plan (DAMP) and prepared their ROWD. These documents were to identify the status of the program and make recommendations/commitments to improve the program through the 'iterative process' identified in the

regulations. Had the permittees wanted to develop comprehensive management plans for their individual watersheds, they were free to do so.

190. Comment - There are concerns that some of the more prescriptive requirements such as the inspection program, may mandate duplicative costs that will not result in significant water quality improvements, especially where regional solutions are being implemented. (IRWD 11/19)

Response - An industrial/commercial/construction inspection program is a fundamental part of most MS4 programs across the country and closely mimics the pre-treatment inspection program conducted by sanitation districts. This is particularly significant when one considers that even though sanitation district discharges are treated, usually highly treated, prior to discharge, inspection of facilities that contribute to that discharge is warranted. In the case of storm water collection systems, even when 'Natural Treatment Systems' are employed, without some control over the pollutant loads entering these systems, discharges are likely to violate receiving water limits.